MANUAL

TT KNOWLEDGE FORCE 2014 R2 PROFESSIONAL ADMINISTRATOR'S REFERENCE

Imprint

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TT Knowledge Force 2014 R2 Professional - Administrator's reference
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1 Introduction

1.1 Objective

The Administrator Manual outlines the settings that can only be introduced by an administrator. It should be regarded as a supplement to the User Manual – the content of which it is assumed the reader is already familiar with.

1.1.1 Which Workbench views are specifically intended for an administrator's eyes?

The Workbench offers two additional views for administrators. It's possible to switch from one to the other via the tasks at the top of the screen:

1.1.2 Document types

Each document is assigned a particular document type – such as 'user documentation', 'process documentation' or 'system documentation'. The document type offers a way of grouping documents together based on their content, and is therefore crucial to improving clarity. Document types are specified in the Document types maintenance view and can be configured as the administrator sees fit.

Various editing rights can be defined for document types in the maintenance roles (please also refer to: How to create a maintenance role).

1.1.3 Settings

This is where universal settings are introduced, such as those specifying the logical process levels for the process model and settings relating to the administration of document repositories. This is also where the various users are administered.

1.1.4 Other administration functions

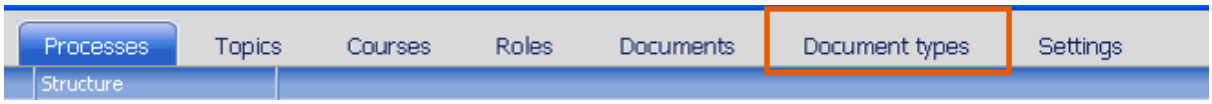
In addition to the Administration views, there are some additional administration functions which have been implemented as reports (for importing process structures from Excel tables, for example). These administrator reports can be found on the other views, but they can only be accessed by an administrator. Settings that are made on a one-off basis during the installation process – and which only have to be modified in exceptional circumstances – are stored in XML-based configuration files.

Such settings can only be accessed by the server administrator and they are not supported by a web-based interface. Administration reports and configuration files will be described in greater detail toward the end of the manual.

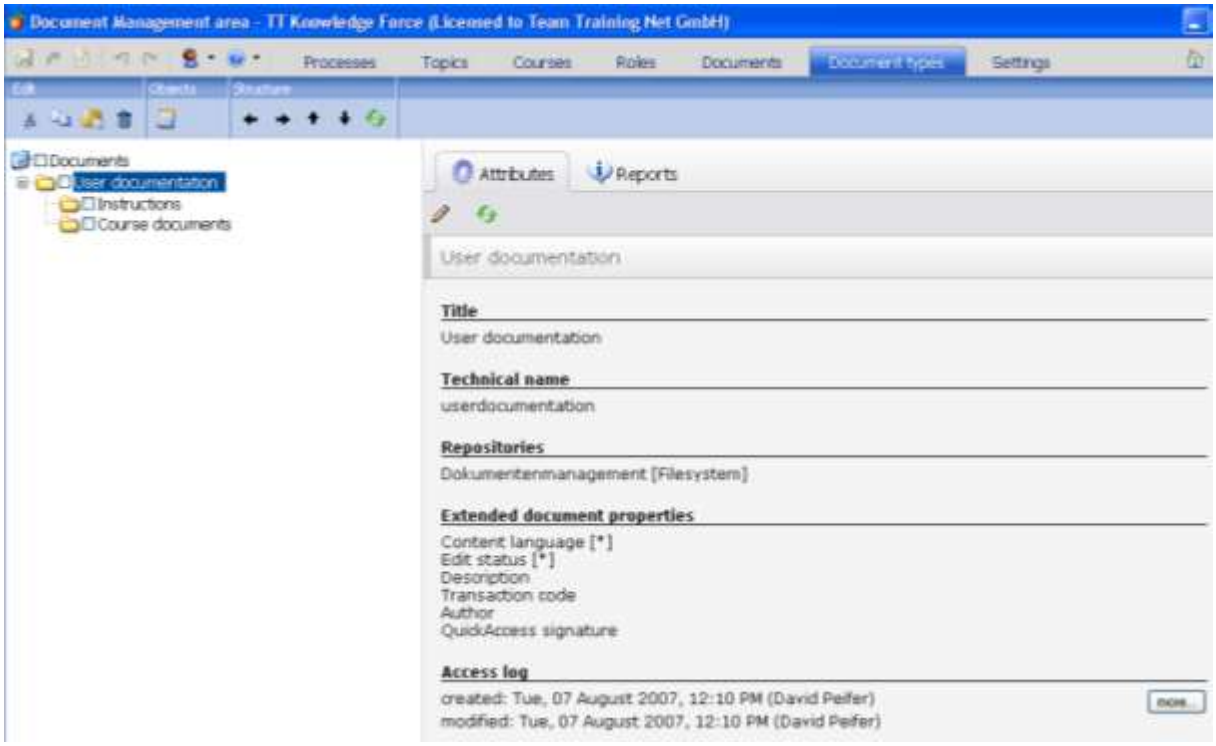
2 Document and document types maintenance

2.1 Accessing the Document types maintenance view

The Document types maintenance view, with which all the document types used can be maintained centrally, is accessible via the **Document types** task.

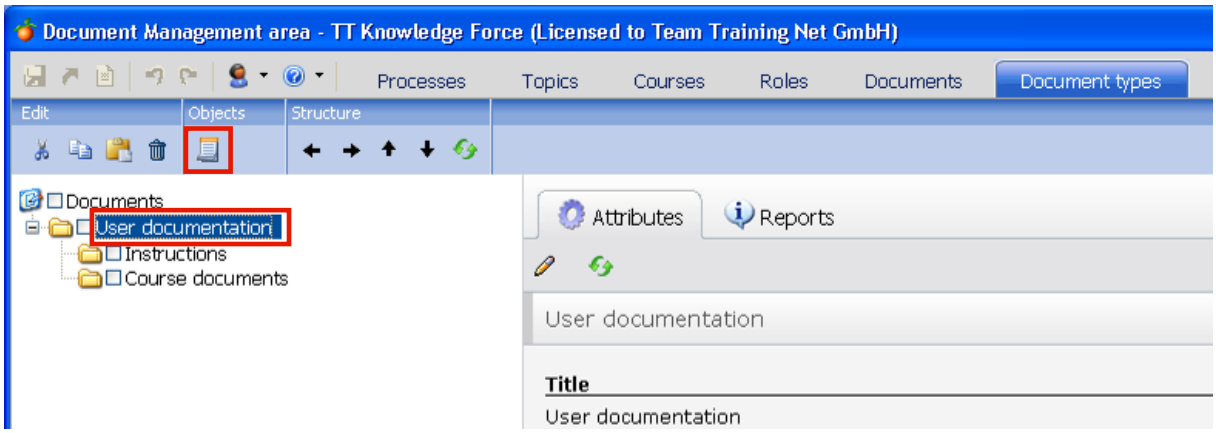


» Please switch over to the task.



Here, the various document types have a tree-like structure - meaning that the document types can either be displayed on a single-level hierarchy or nested into each other as you see fit. In this example, the 'User documentation' document type has been subdivided into 'Instructions' and 'Course documents'.

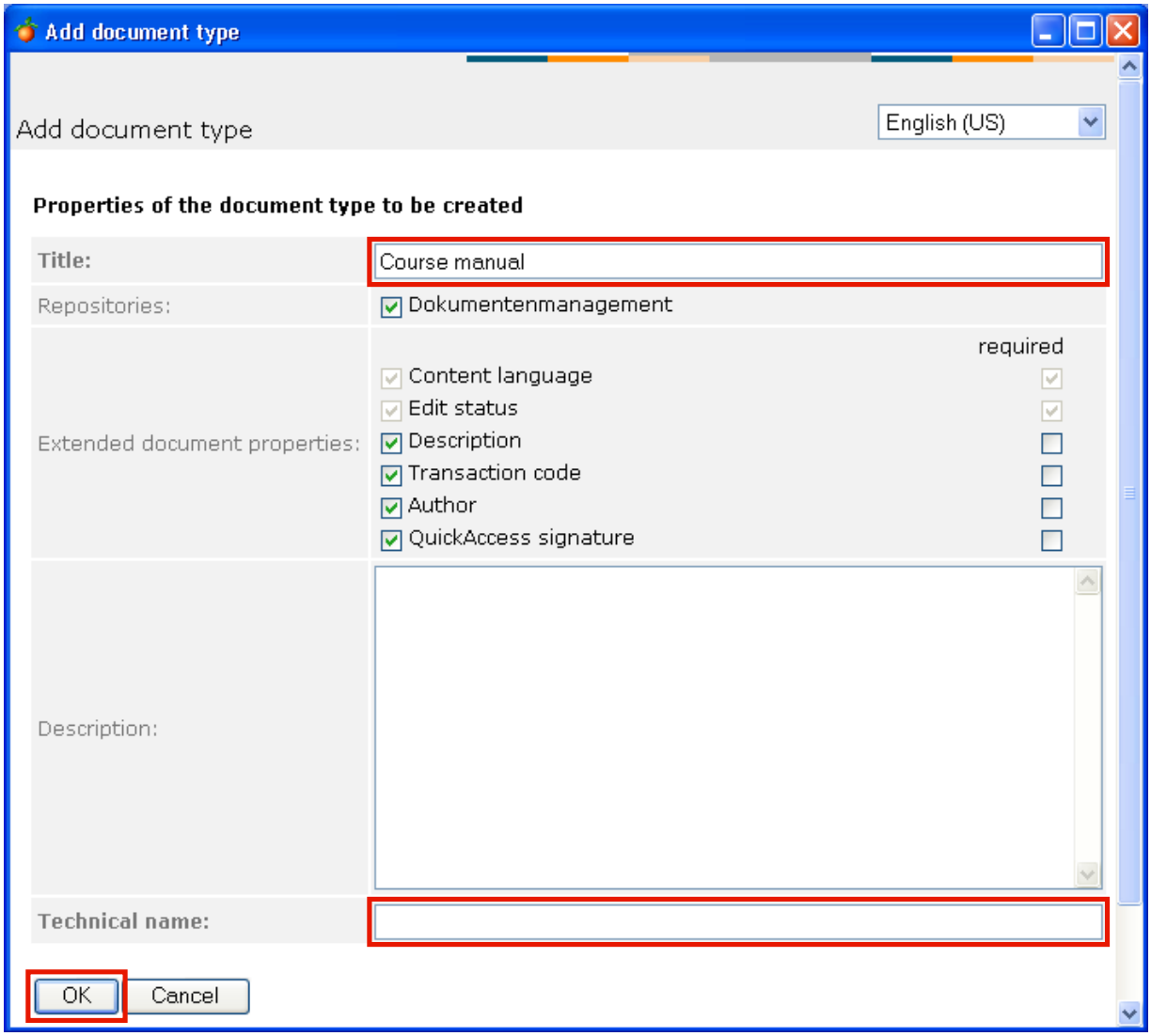
2.2 How to create a document type



The first step in creating a new document type involves selecting the higher-level document type in the tree.

» Select the **User documentation** document type

» Now use the **Add new document type**... button



A dialog then opens. Start by specifying a **Title** for the new document type. If you want to maintain the title in several languages, you should use the language toggle at the top right-hand corner of the dialog.

» Start by activating the input field for the **Title**.

» Specify a title for the document type. In this example: **Course manual**.

One or more document repositories can also be assigned to a document type. When an author creates a document of this type, only the above document repositories will be offered for selection (if only one document repository is to be assigned, the Wizard will automatically skip this step).

You can define advanced document properties to specify which of a document type's properties are to allow editing. The 'Content language' and 'Edit status' checkboxes are always selected as document properties and can therefore not be deactivated.

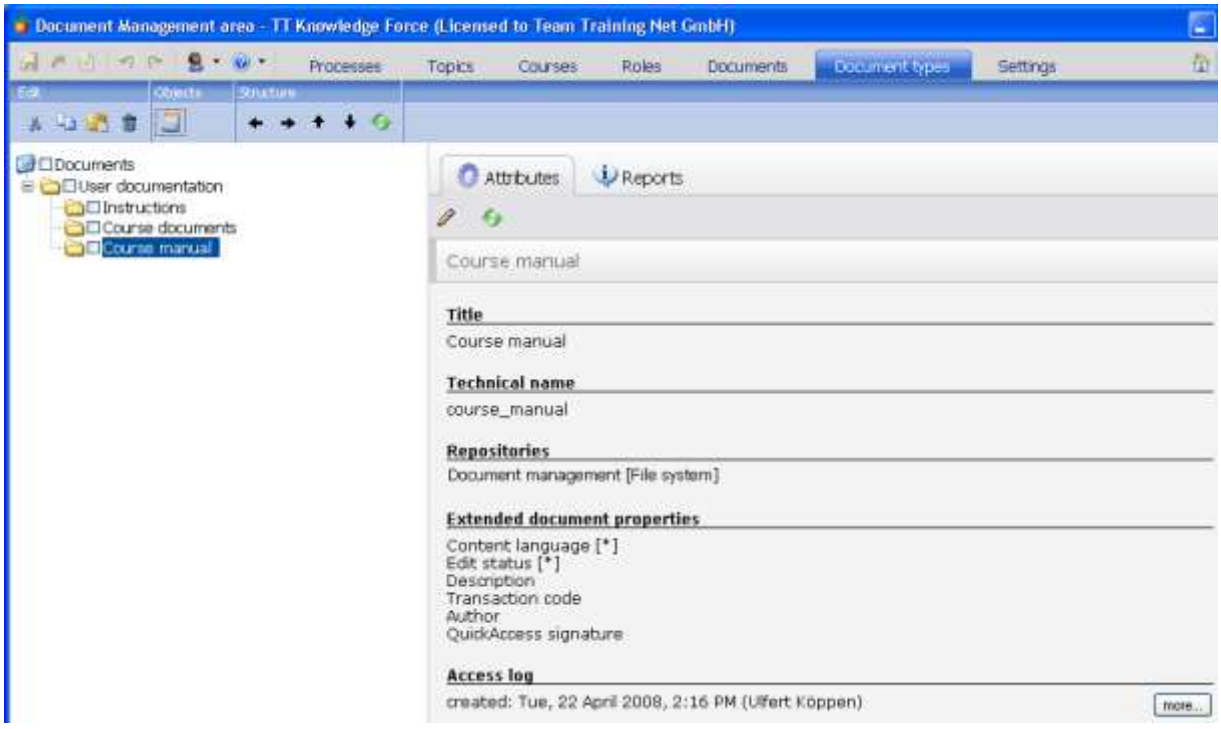
The document properties available for selection depend on the configuration. Consequently, the advanced document properties may also contain other entries.

» Activate the input field for the **Technical name**.

Specify a **technical name**. Each document type has to have a unique technical name, which may not include special characters such as German umlauts. The technical name is primarily required for the TT Accelerator (to facilitate the filtering-out of particular document types, for example).

» Specify the technical name for the document type. In this example: **course_manual**.

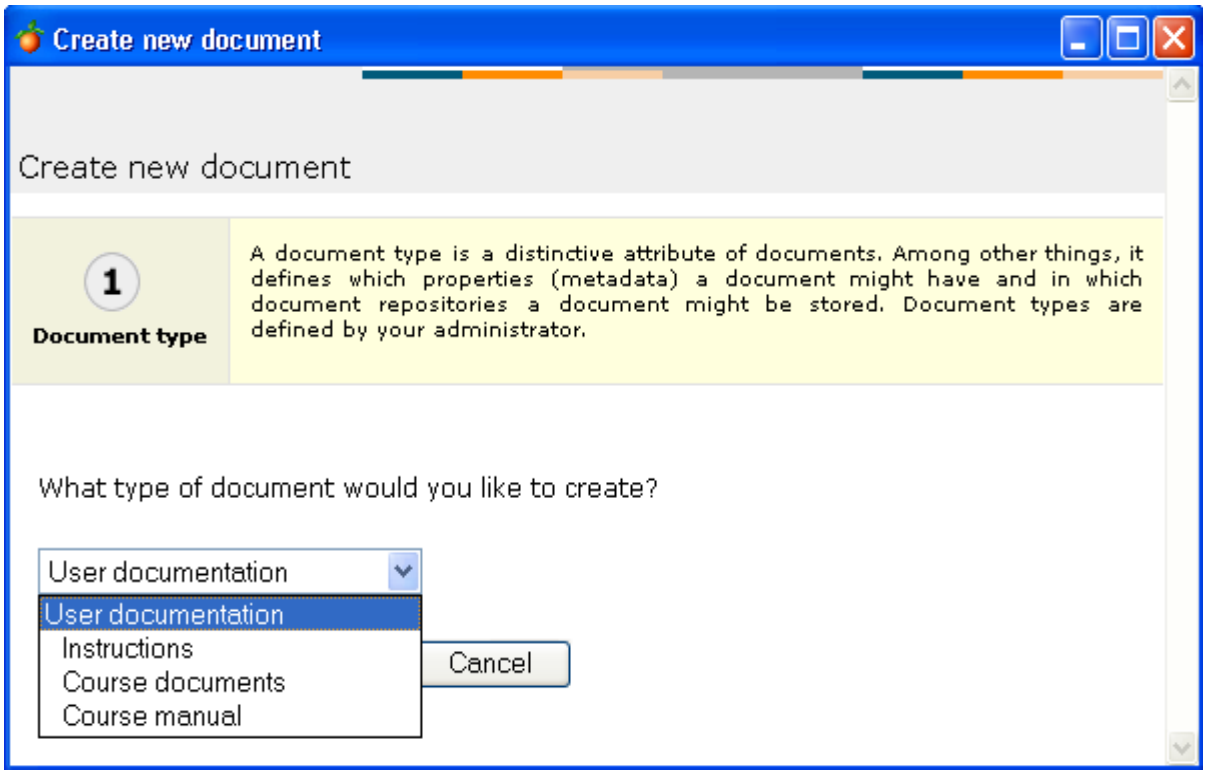
» Confirm your entries via the OK button.



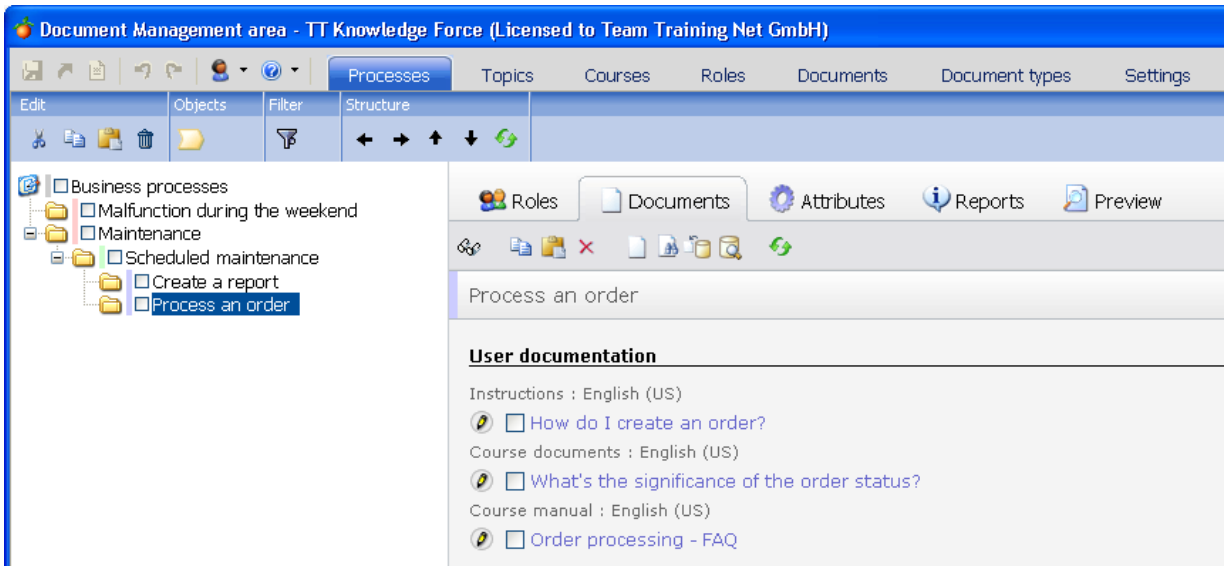
The new document type then appears in the tree and it is selected by default.

2.3 What's the significance of the order in which document types appear in the tree?

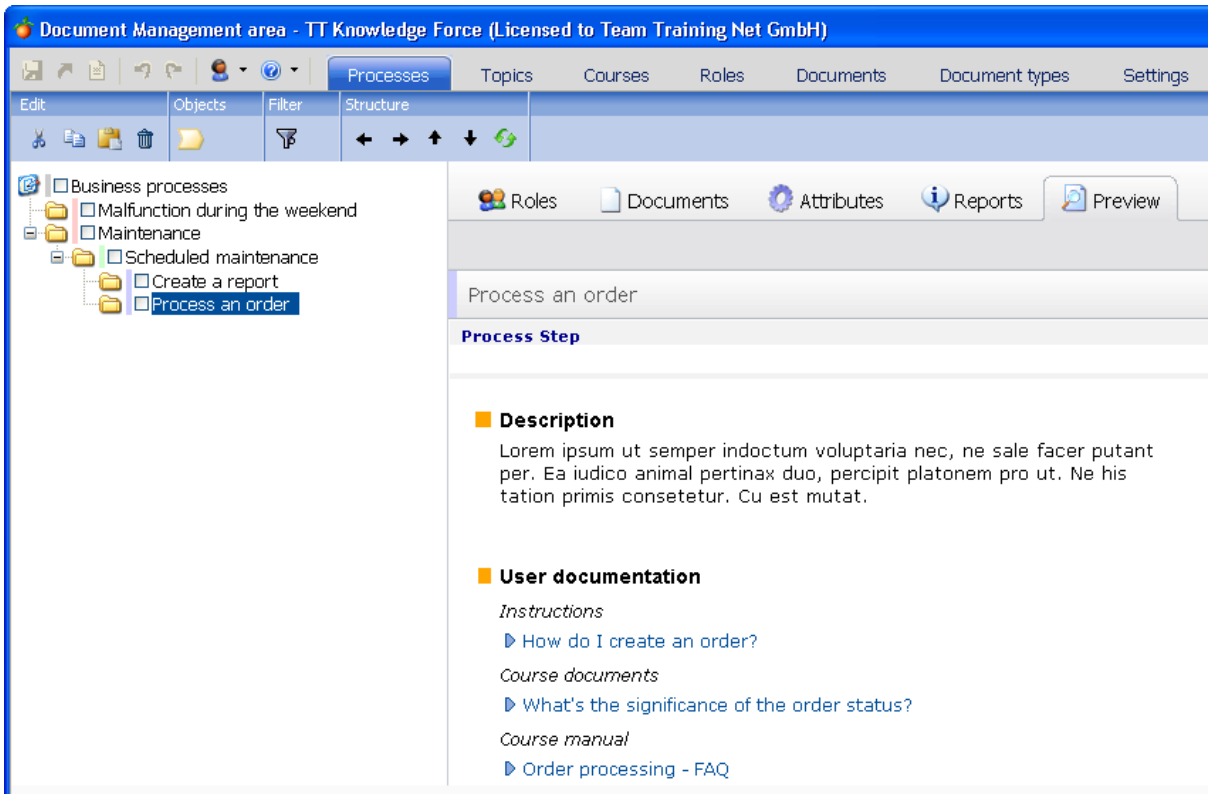
Wherever it's possible for an author to select a document type, the various document types are presented according to their position within the tree.


Create new document
Create new document
1
Document type
A document type is a distinctive attribute of documents. Among other things, it defines which properties (metadata) a document might have and in which document repositories a document might be stored. Document types are defined by your administrator.
What type of document would you like to create?
User documentation
User documentation
Instructions
Course documents
Course manual
Cancel

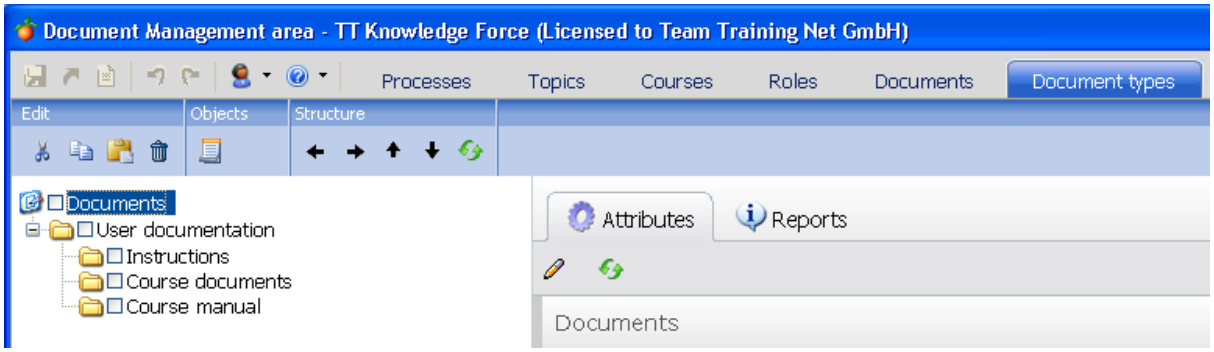
If Workbench has been configured in the standard manner, the documents in the Process maintenance area are displayed sorted according to document type.



Similarly, when the Web Publisher has been configured in the standard manner, documents are displayed sorted according to the document type. However, only released documents are displayed.



2.4 How to structure document types within the tree



Directly moving document types

This button is for moving the selected document type up a position.

This button is for moving the selected document type down a position.

This button is for downgrading the selected document type.

This button is for upgrading the selected document type.

Copying document types via the clipboard

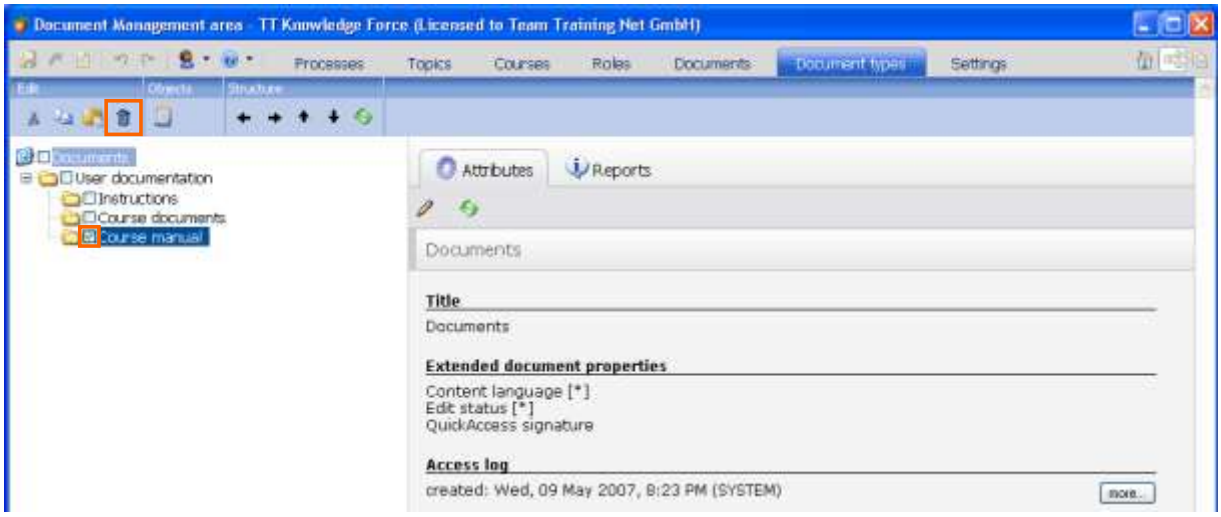
Whenever a **document type** is transferred to the clipboard with **Copy selected** and then inserted somewhere else, a **real copy** of the document type is generated. It's not possible to have several references to the same document type within the tree.

Moving document types via the clipboard

Whenever you want to move a document type across great distances, start by cutting it out with **Cut selected**. Then select the target position and click the **Paste clipboard** button.

Whenever a document type is moved or copied, all subordinate document types are automatically included in the operation.

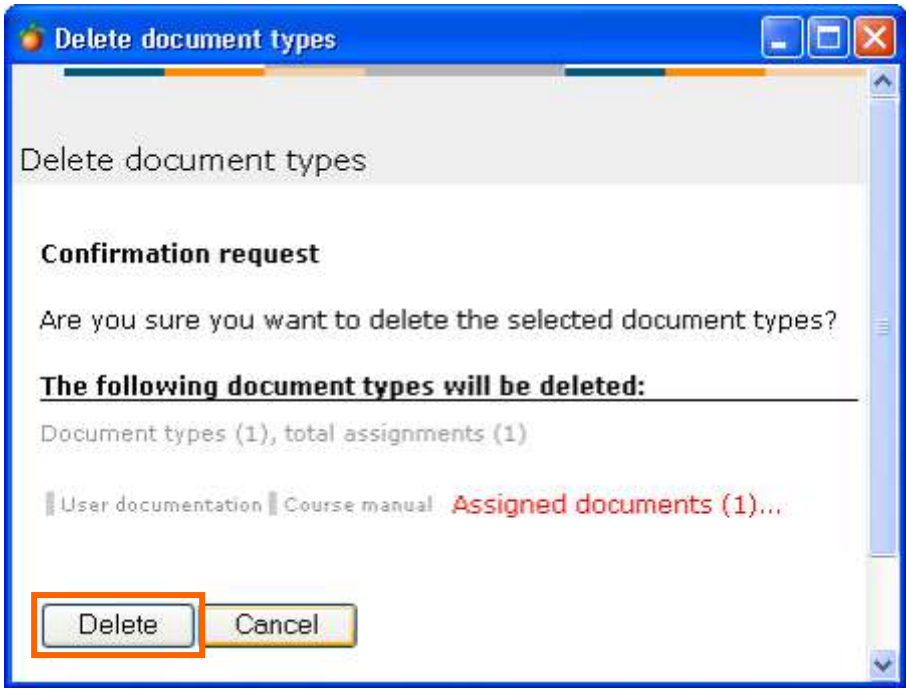
2.5 How to remove a document type



To remove a document type, start by highlighting it in the tree.

» In this example, select the **Course manual** document type.

A document type can be irrevocably deleted via the **Delete selected...** button.

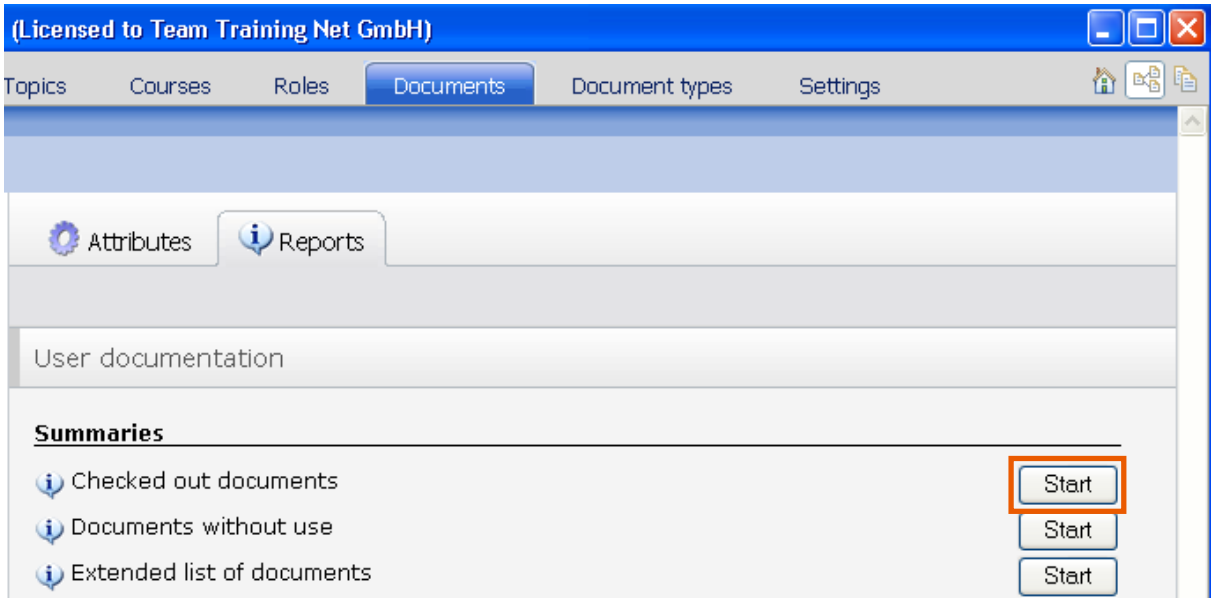


If you are sure that you want remove the document type, confirm the confirmation prompt that then appears by clicking the Delete button.

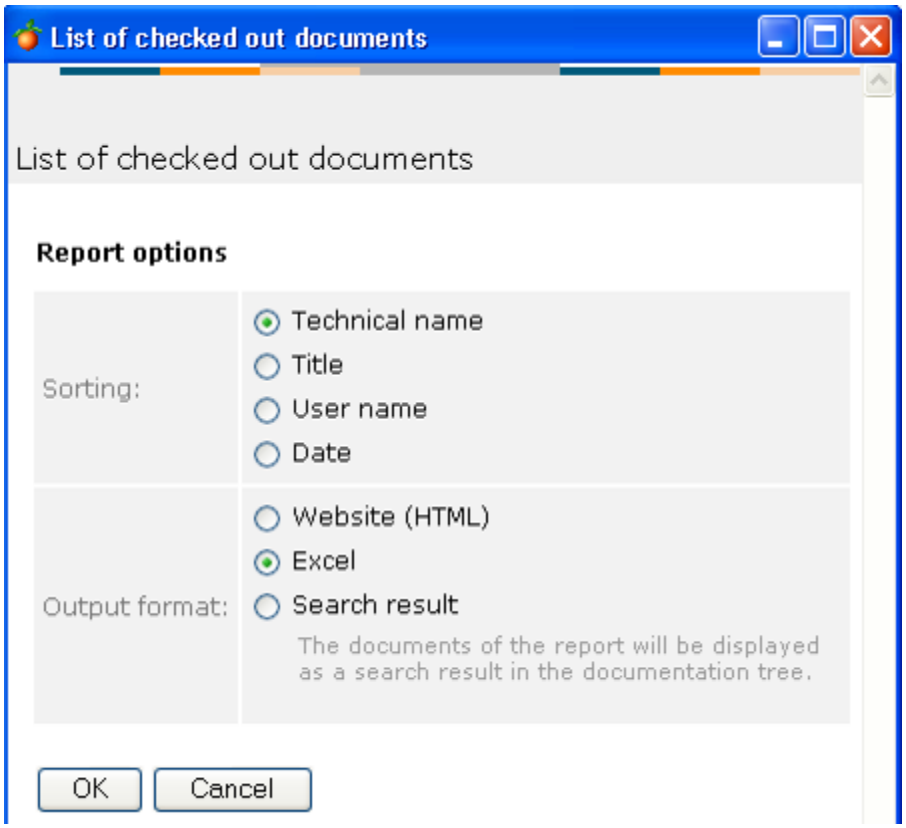
Whenever a document type is deleted, all linked documents are automatically included in the deletion operation. However, the confirmation prompt warns you of this and also quotes the number of affected documents, as well as the processes to which the documents have been assigned.

2.6 How to display checked-out documents

You can also display a list of all checked-out documents. The corresponding report is accessed via the **Documents** task.



» Click the **Start** button next to **Checked out documents**.



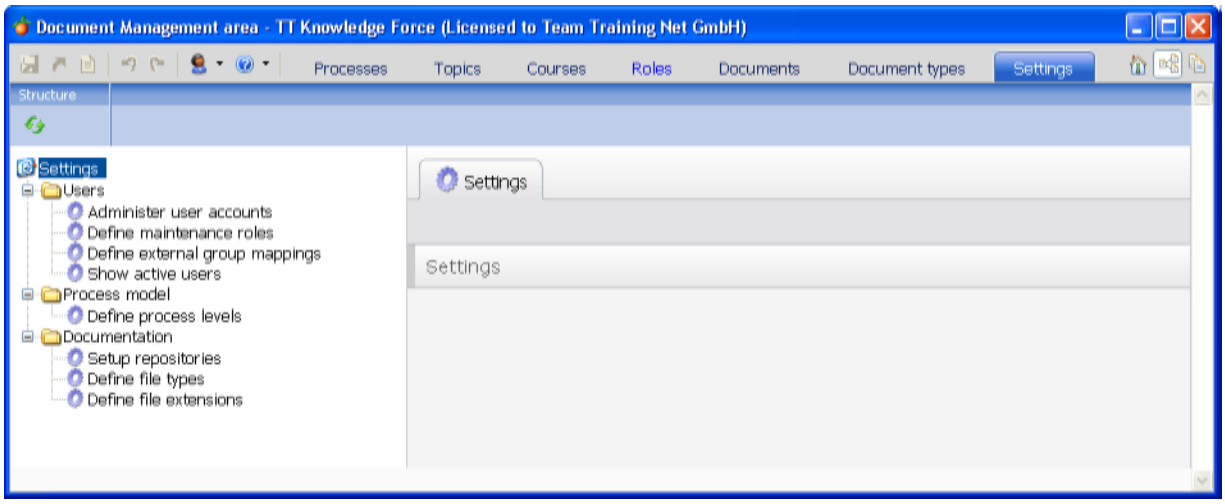
A dialog then appears in which you can select the criterion according to which the list is to be sorted. The dialog also allows you to specify the output format. You can choose between a Website (HTML), Excel and Search result.

To create the list, change the options as you see fit and then click the **OK** button.

3 User maintenance

3.1 How to switch over to the Maintenance view for universal settings

A separate Maintenance view is provided for universal settings. It can be accessed via the **Settings** task:



The settings are subdivided into the following categories:

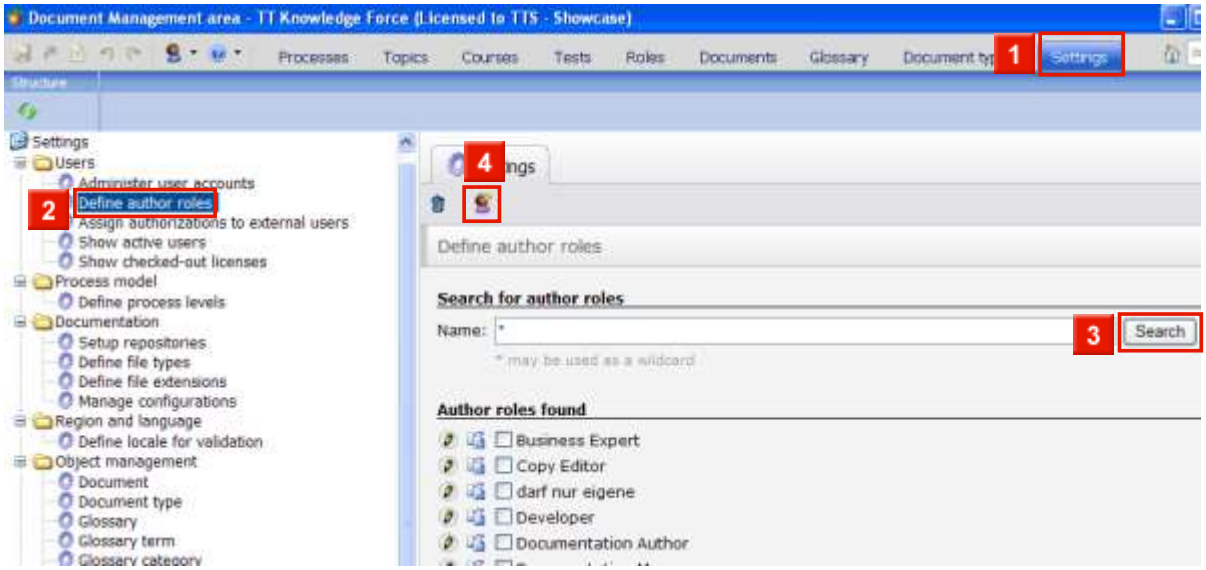
User
User account maintenance, Define maintenance roles and External group assignments

Process model
Maintain logical process levels

Documentation
Repository maintenance, File types and File extensions

3.2 How to create an author role

An author role (in previous versions of TT Knowledge Force, the term "maintenance role" was used) specifies which functions are available to - and can thus be used by - a user who has been assigned to this particular author role. The purpose of author roles is to ensure that each user has access to only those functions in the user interface that he/she actually requires to perform his/her specific tasks. It's possible for a user to be assigned several author roles at the same time (e.g. trainer and author). He/she then has access to all functions that are available for the selected author roles.



To create a new author role, you can avail of the **Add new author role...** button under the 'Define author roles' tree entry.

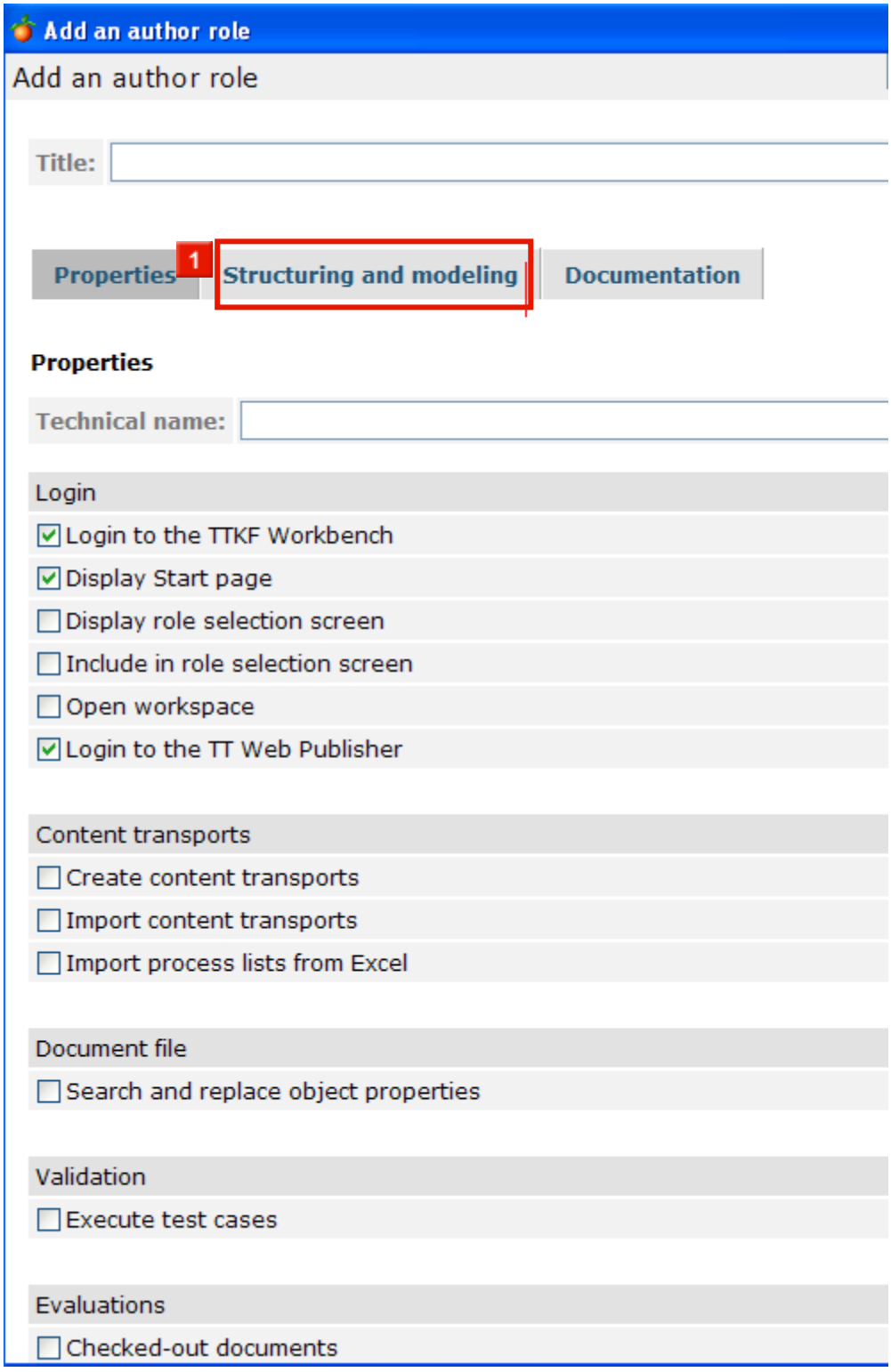
» 1 Click the **Settings** tab.

» 2 Click the **Define author roles** tree entry.

» 3 Click the **Search** button.

Sometimes, you need a new role that actually is just a slight variation of an existing author role. To speed up the creation of new author roles, you can "clone" any existing role using this button , then introduce the changes to the copied role in the same way as outlined.

» 4 Click the **Add new author role...** button.



This accesses a dialog in which you can define the new author role. The first section is for specifying general properties - the **Title** and **Technical name** - of the author role. These fields are mandatory. Further settings on the **Properties** tab include:

Login

The first authorizations that need to be specified involve logging-on to the components of TT Knowledge Force. By default, each author role is authorized to log-on to both the Workbench and the Web Publisher (Portal). You can also turn the Start page on or off for the role, and set the workspace to be opened by default when switching to the "Structuring and modeling' perspective.

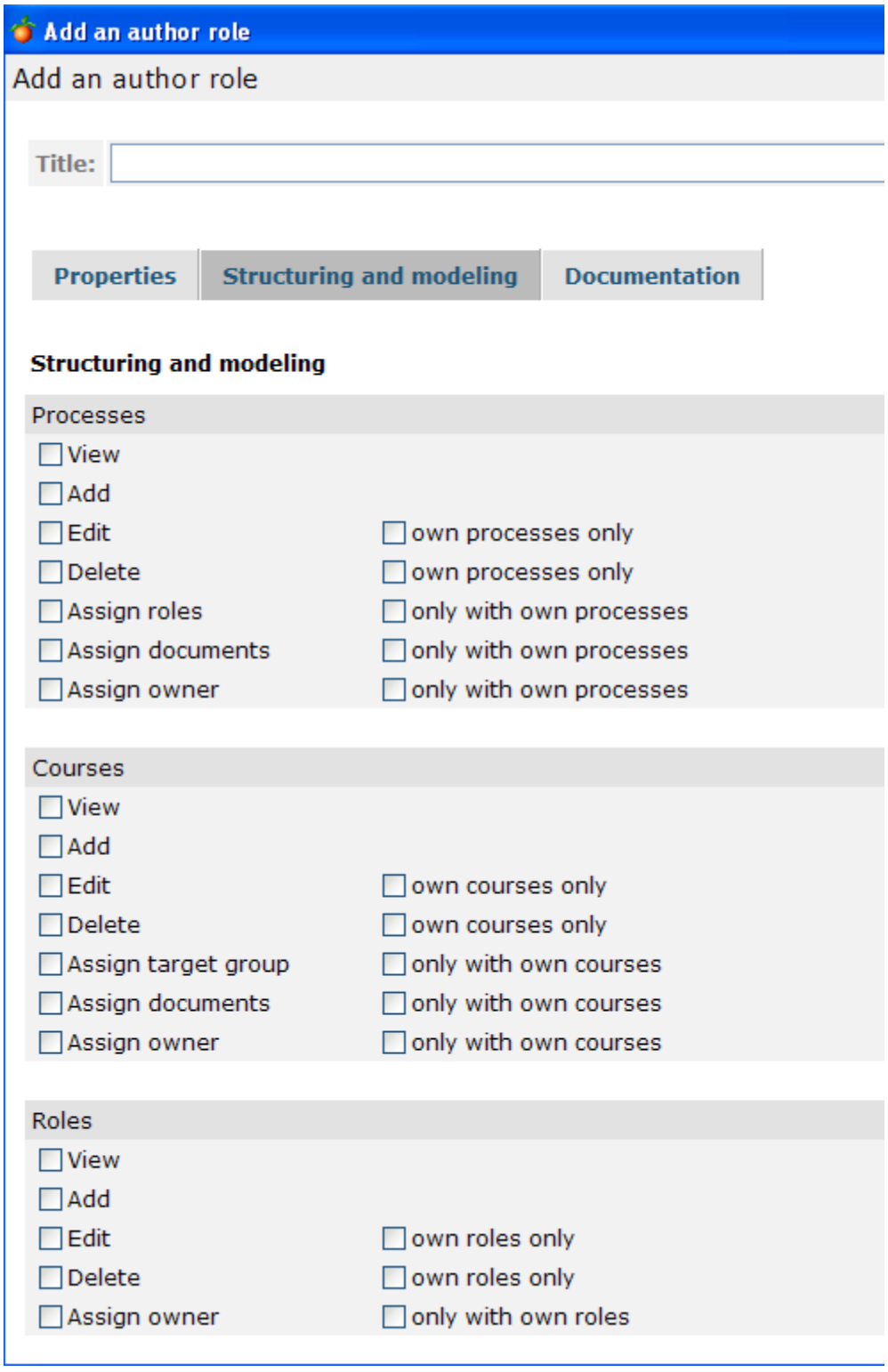
The settings concerning the Role selection screen let you specify whether a user with this author role will be presented with a special start screen where he/she can choose the desired scope (e.g. Author, Translator, ... or "All scopes") and whether the present author role is to be included in that selection screen.

Content transports

Here you can grant users the right to import and export data to/from the Workbench via content distribution packages, Excel import, or SAP Solution Manager synchronization.

At the bottom of the page, you can specify whether a user with this role may use the Object property search and replace function, Validation (Rollout Manager), and reports on checked-out documents.

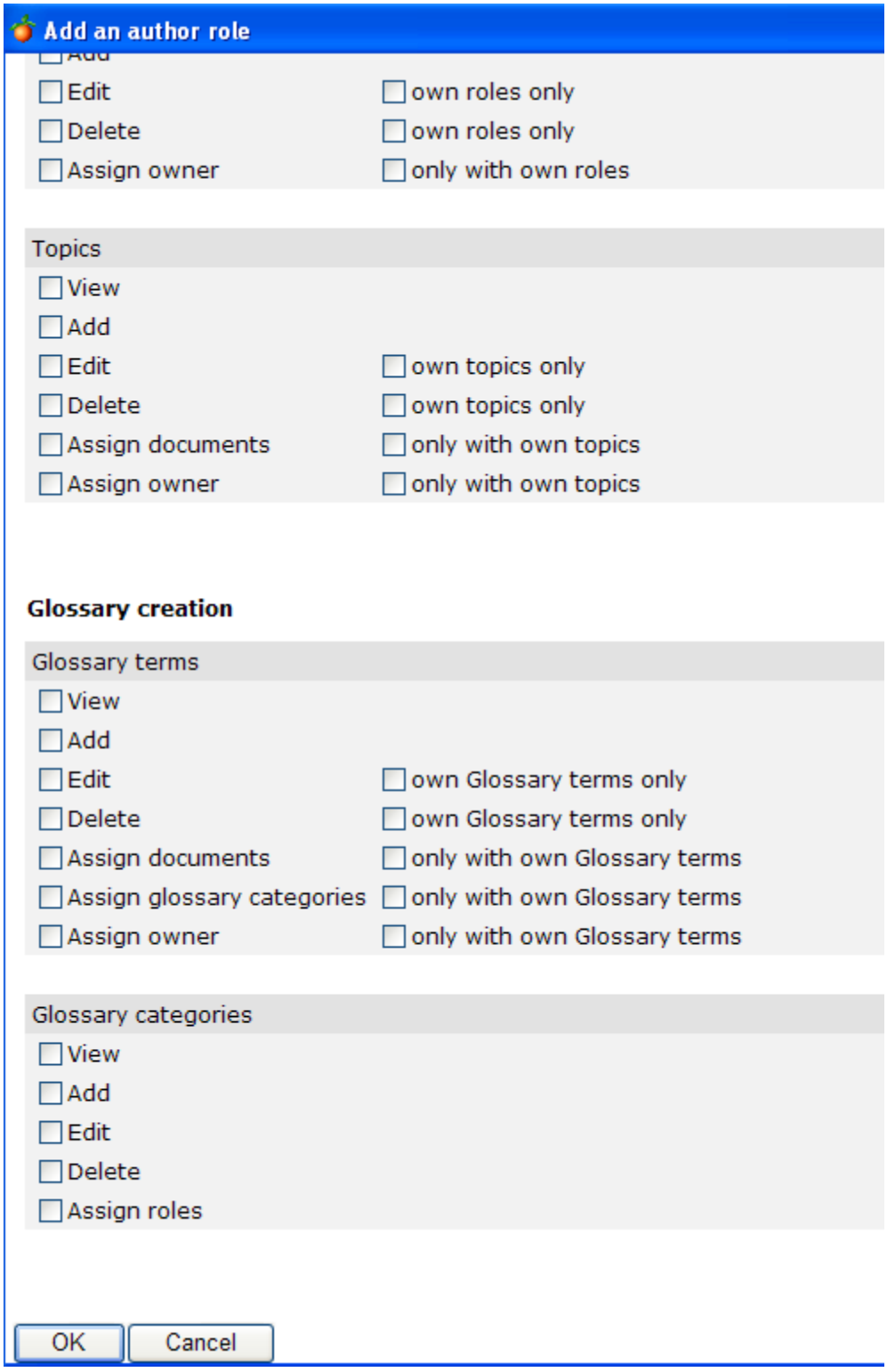
» Click the **Structuring and modeling** tab.

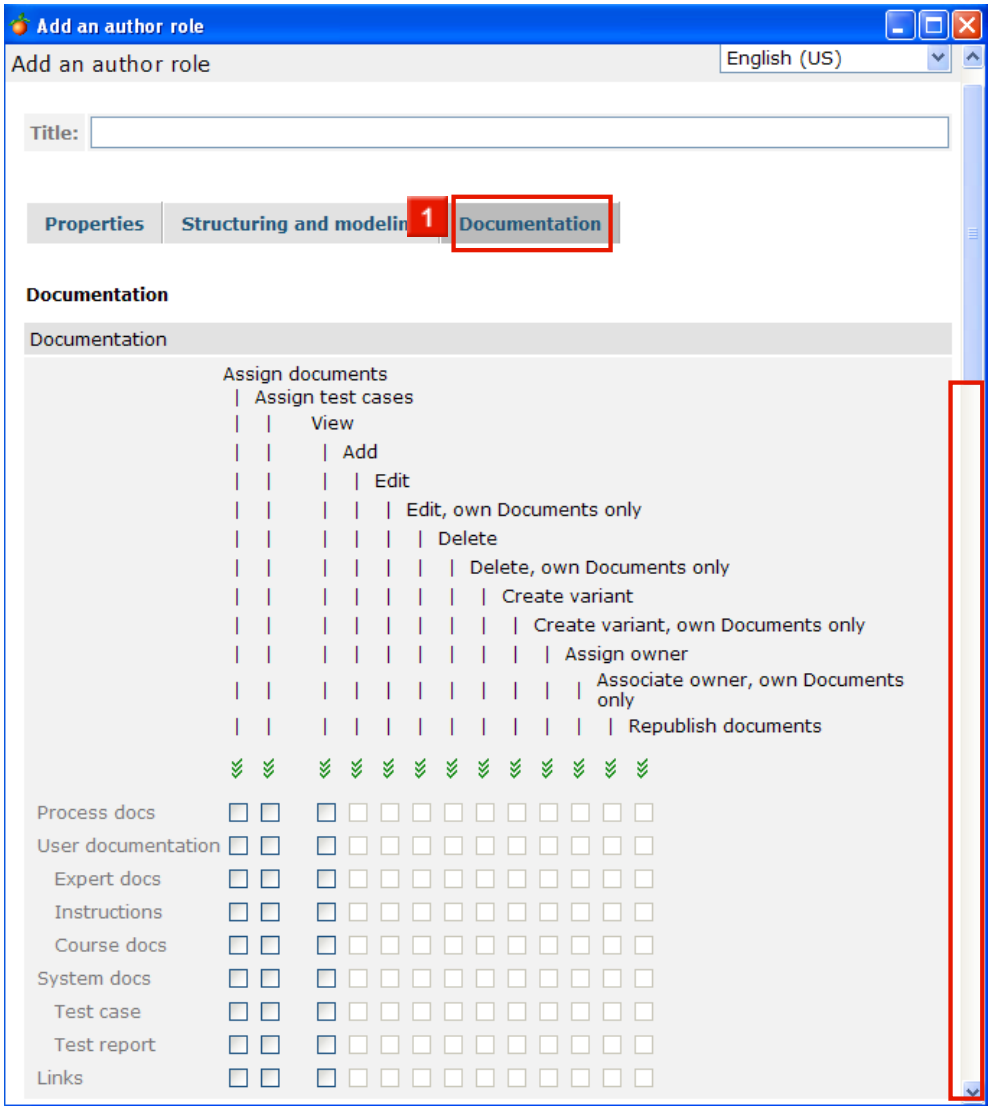


The next authorizations involve **Structuring and modeling**. You can separately specify which authorizations the new author role is to enjoy in relation to processes, courses, roles and topics. Note that you can restrict a modeling right to "own processes / courses / roles / topics only". Note that the respective task will be hidden from a user's view if none of the options is enabled.

Furthermore, you set the right for glossary maintenance.

The authorizations required by the various author roles will vary greatly - depending on your particular company's line of business.


Add an author role
Edit
own roles only
Delete
own roles only
Assign owner
only with own roles
Topics
View
Add
Edit
own topics only
Delete
own topics only
Assign documents
only with own topics
Assign owner
only with own topics
Glossary creation
Glossary terms
View
Add
Edit
own Glossary terms only
Delete
own Glossary terms only
Assign documents
only with own Glossary terms
Assign glossary categories
only with own Glossary terms
Assign owner
only with own Glossary terms
Glossary categories
View
Add
Edit
Delete
Assign roles
OK
Cancel

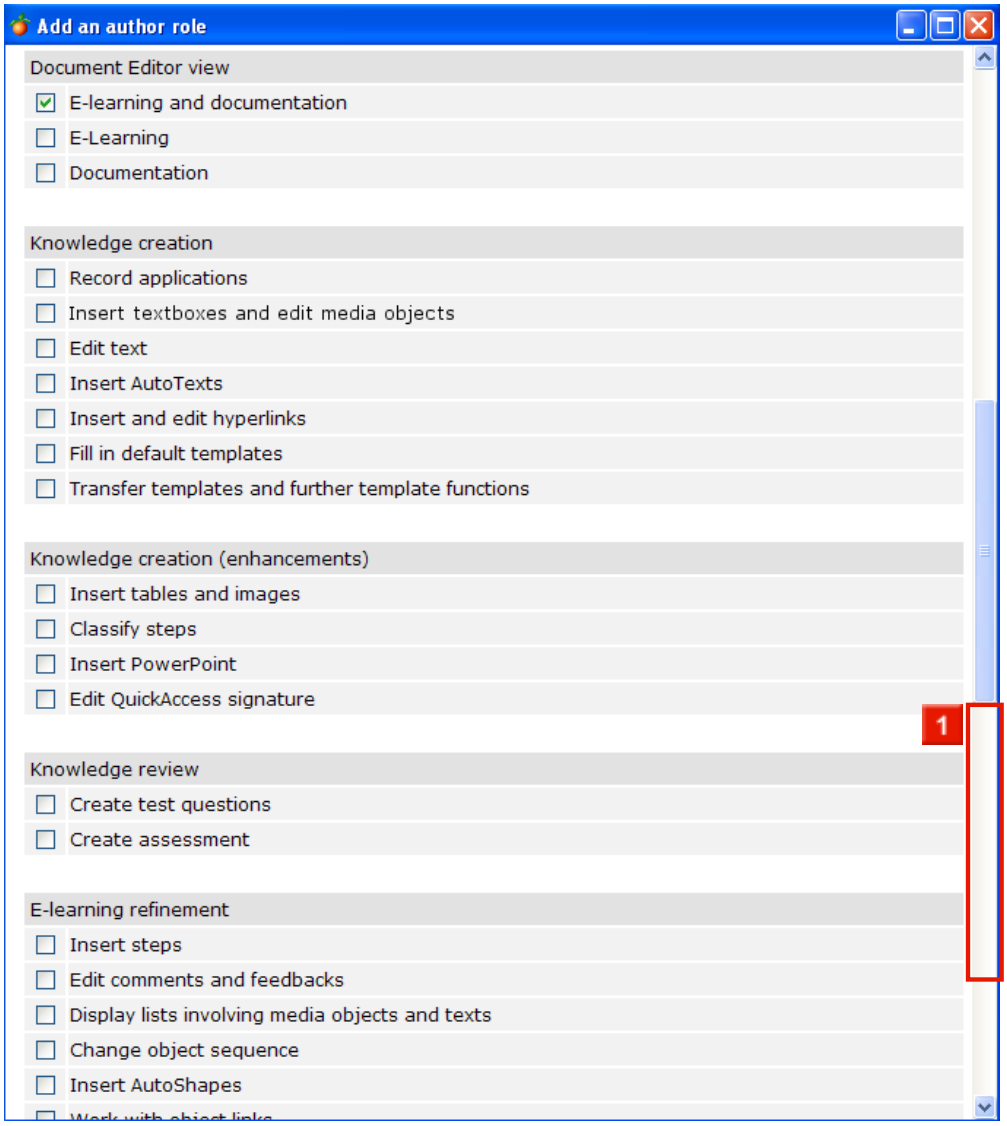


» 1 Click the **Documentation** tab.

On the documentation tab, the first section lets you specify which rights a user with this author role enjoys with regard to documents stored in the Integrator. As you can see, settings can be introduced for each document type.

If you want to select the checkboxes for an entire column - or remove the selection - you merely need to double-click one of the checkboxes. This will transfer the respective selection to all other checkboxes in the particular group. Alternatively, you can use the checkmark button to set/unset all rights for the respective column.

Please note that you cannot set all options, as the restricted options ("Delete, only own Documents") and the full options ("Delete") mutually exclude one another.

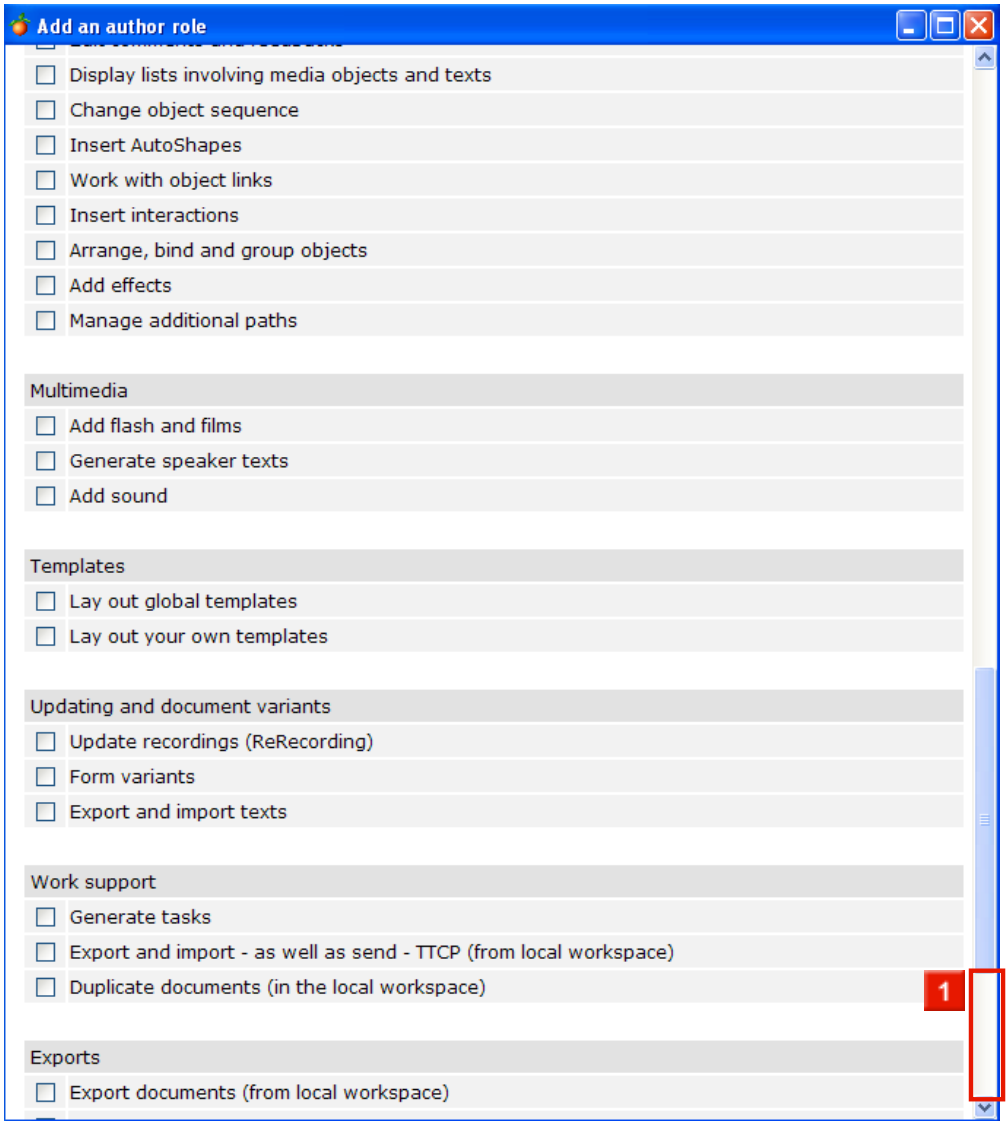


The next section comprises in-depth settings affecting the rights to locally edit documents, including recording, text editing, template usage, refinement, rerecording and publishing of documents.

Reducing the rights in this section will result in a much simpler look and feel of the authoring component, which may be useful for inexperienced users.

Note that via the 'Document editor view' section, you can even restrict this role's perspective in the Document Editor to just 'E-learning' or 'Documentation'.

» 1 Click the vertical scroll bar.



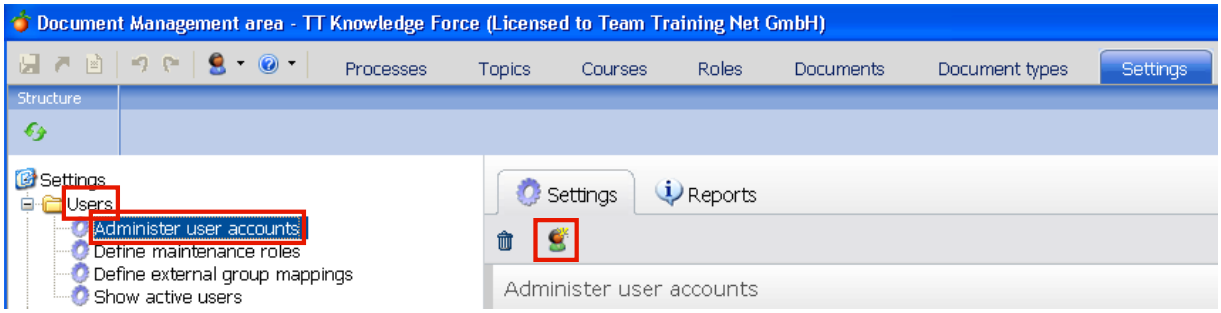
Note that you can also control the right to delete and / or recreate document versions under 'Version management'. This of course only impacts on repositories for which versioning is enabled.

The author role will become available as soon as your settings are confirmed by clicking the **OK** button - it can then be assigned to any user. Needless to say, author roles can also be subsequently changed.

Please note that changes made to an author role will directly impact on all users to which the particular author role has been assigned.

3.3 How to administer user accounts

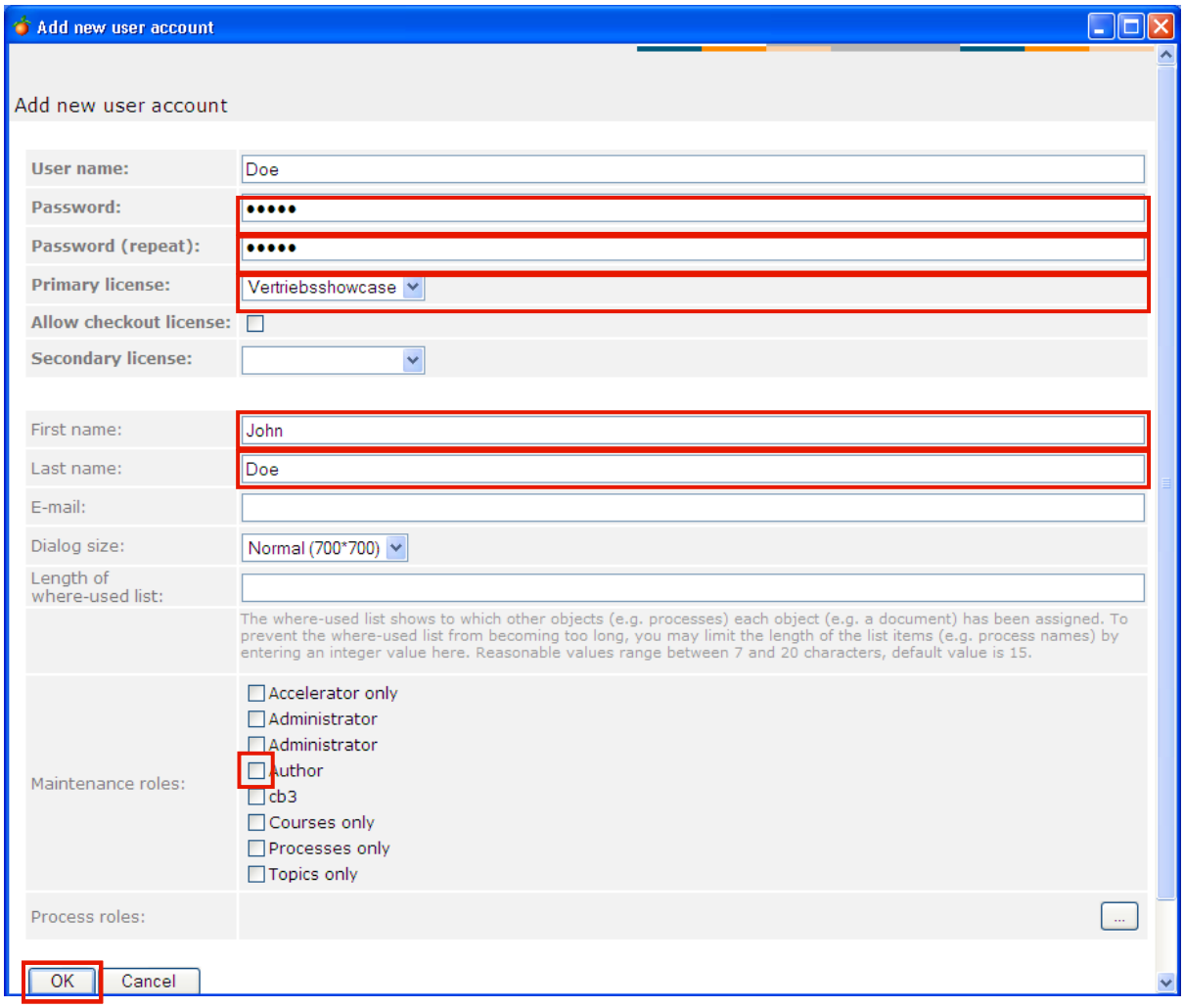
3.3.1 How to create a new user account



To create a new user account, select the **Users** -> **Administer user accounts** entry in the tree on the left.

Another way to create or update user accounts is via an Excel import. Please refer to the **Importing structures from Excel** chapter on how to accomplish this.

To create a new user account, select the **Add new user account...** button.



The dialog that then appears is for maintaining all data relevant to the new user.

For each user, at least a **Primary license** has to be chosen in order for the user to be

able to log on to the server. The following text will remind you to provide a license from the corresponding drop-down field:

The user is or will be deactivated.
Please choose a primary license to enable the user.

You can also specify a secondary license, which may enable the user to log on if all licenses of the primary group are currently taken. For users who frequently have to work offline, you may want to **Allow checkout licenses**.

For external users (like LDAP users), you have to assign at least a primary license via the administrative section "Assign authorizations to external users" ("Externe Berechtigungen pflegen").

» Specify a user name. The future user will have to enter this when logging-on to TT Knowledge Force. In this example: **Doe**.

» Now enter the **password**. Since the actual characters of the password are not displayed, you have to enter it twice to rule out the possibility of a typing error. The password in this example is **12345**.

» Enter the **first** and **last names** of the new user into the appropriate fields. In this example: **John Doe**.

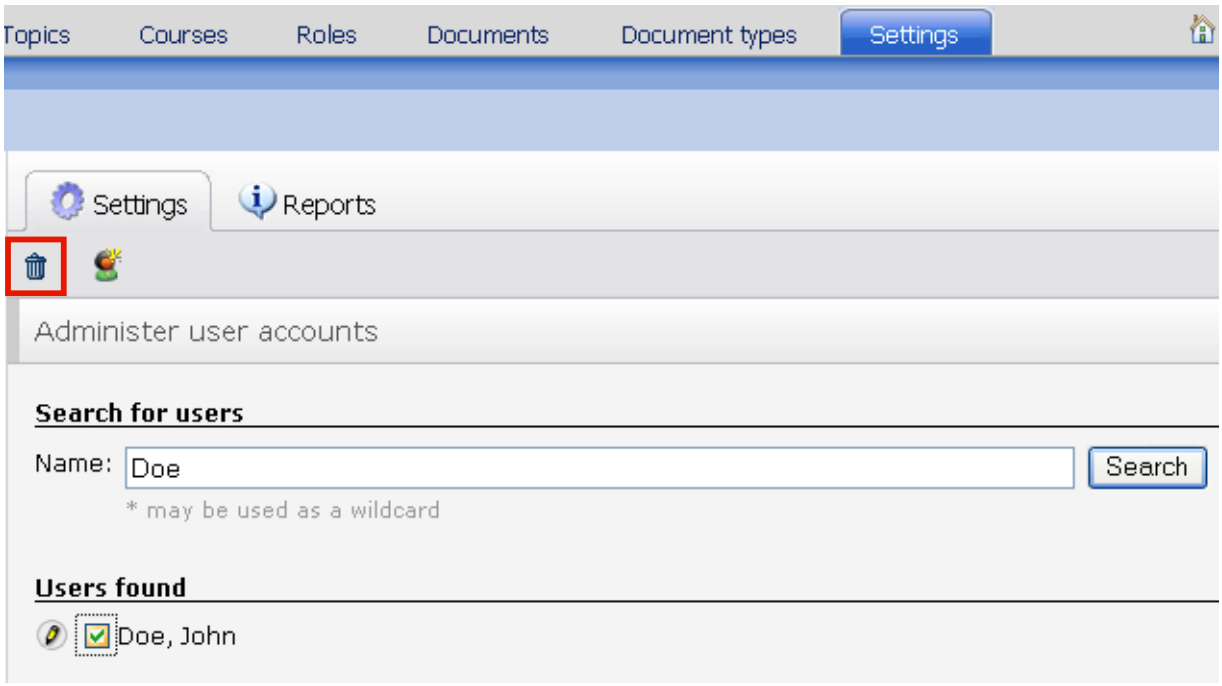
In order for the notification feature to work, you may want to specify the user's **e-mail address**. Note that it can also be provided by the user later on.

The **Length of where-used list** relates to the assignment display for documents and roles. If the title of one of the elements that appears in this assignment display is too long, it will be abbreviated with '…'. Here you can set the number of characters after which the abbreviation is to appear.

» Select the maintenance role that is to be assigned to the new user by activating the appropriate checkbox. In this example: **Author**.

» Confirm your entries by clicking the OK button.

3.3.2 How to delete an existing user account

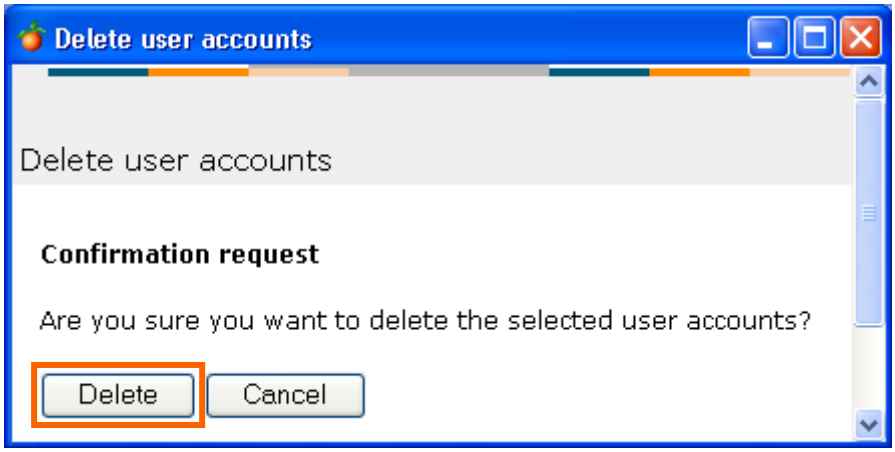


If you want to delete a user account, enter the user's name (or part of it) into the search screen and then start the search via the Search button.

Then select the user you want to delete from the list of users found.

Use the Edit properties... button if you merely want to make changes to an existing user account. This accesses the same dialog as the one used to create a new user account.

» Click the **Delete selected** button.



» A confirmation prompt then appears. Here you need to confirm the deletion of the user account via the **Delete** button.

The deletion of a user account cannot be undone. Please be particularly aware that all a user's links to the objects that have been created (such as processes or documents) are then lost. However, the respective user name will still be listed in the change log for the objects.

3.4 Role objects and their functions

3.4.1 Modeling rights

3.4.1.1 Processes

Rights	Function
View	The role may only view process steps. Changes and deletions are not possible.
Add	The role may create new processes.
Edit	The maintenance role may change the metadata and process levels in accordance with process model specifications. However, the process may not be deleted.
Delete	Process steps may be deleted.
Assign roles	The maintenance role may assign process roles to a process step, assuming that they have been maintained.
Assign documents	The role includes the authorization to assign existing documents. In the event that the role also includes the right to create documents, it supports the creation of a new document directly in the process step.

3.4.1.2 Courses

Rights	Function
View	The role may only view courses. Changes and deletions are not possible.
Add	The role may create new courses.
Edit	The maintenance role may change the metadata and courses. However, the course may not be deleted.
Delete	Courses may be deleted.
Assign target group	The maintenance role may assign process roles to a course, assuming that they have been licensed and maintained.
Assign documents	The role includes the authorization to assign existing documents.

3.4.1.3 Roles

Rights	Function
View	The role may only view process roles. Changes and deletions are not possible.
Add	New process roles may be created.
Edit	The maintenance role may change the metadata and roles. However, roles may not be deleted.
Delete	Roles may be deleted.

3.4.1.4 Topics

Rights	Function
View	The role may only view topic folders. Changes and deletions are not possible.
Add	The role may create new topics.
Edit	The maintenance role may change the metadata and topic folders. However, the topic may not be deleted.
Delete	Topic folders may be deleted.
Assign documents	The role includes the authorization to assign existing documents.

3.4.2 Documentation rights

3.4.2.1 Document types

Rights	Function
View	The role may only view the respective document type. Changes and deletions are not possible.
Add	New documents of this type may be created.
Edit	The maintenance role may access and edit documents of the respective document type. However, documents may not be deleted.
Delete	Documents of this document type may be deleted.

3.4.2.2 Documenting

Maintenance role	Component	Function
Record - Record application	Universal Application Recorder	This component supports the recording of all kinds of IT applications (e.g. SAP, Microsoft, Web applications etc.).
Edit - Add and edit text	Content Editor Basic	Supports the creation of textboxes and the editing of existing text (textboxes or standard text).
Edit - Structure content and insert objects	Content Editor Professional	Advanced editing functions for documentation and e-learning. This component includes Content Editor Basic. Advanced functions refer to the insertion of steps, tables, images etc. and their editing functions.
Edit - Manage other paths	Path Editor	Supports the creation and maintenance of other paths, in addition to the main path, in the e-learning.
Edit - Add effects	Effects Editor	Supports the addition of effects (animations, triggers, Flash, video and audio)
Edit - Generate speaker texts	Dubbing Editor	Is used for generating and maintaining speaker texts.

Edit – Sound	Speech Engine Connector	The Speech Engine Connector connects TT Knowledge Force to a an external, third-party speech engine. This supports the insertion of sound into an e-learning. The speech engine that is to be connected has to be compatible with the SAPI standard.
Edit - Fill in specified templates	Template Assistant	Supports the use of complex texts which were created with the Template Designer.
Edit - Design global templates	Global Template Designer	Supports the design of page templates with a fixed layout and pre-defined placeholders, as well as the design of object templates. This involves global templates that can be used by all users.
Edit - Design own templates	My Template Designer	Supports the design of page templates with a fixed layout and pre-defined placeholders, as well as the design of object templates. This involves own templates that can only be used by this user.

3.4.2.3 Localize

Maintenance role	Component	Function
ReRecording – Localize	Localization Manager	Supports variant creation and the translation of AutoTexts which, for example, were generated while recording software applications in TT Author (English, German, French and Italian included in the standard - other languages available as extension packages) (even without ReRecording).
ReRecording – Localize	XLIFF Synchronization	Supports the exchange of text with translation management systems based on the XLIFF standard.

3.4.2.4 Publish

Maintenance role	Component	Function
Publish – Manuals	Manual Publisher	Is a pre-requisite for the generation of manuals.
ReRecording - Create Web Based Training	Courseware Publisher	This component generates WBTs incl. the distributor page and interfaces to LMS systems.

3.4.2.5 Update

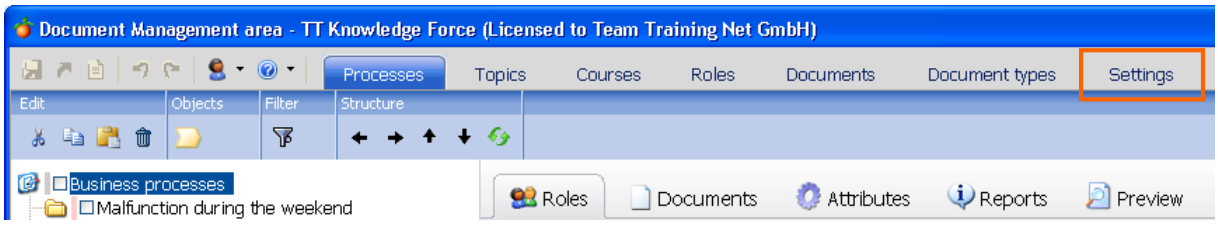
Maintenance role	Component	Function
ReRecording - Update	Content Updater	Supports the ReRecording of recorded sequences for updating purposes, including the option of specifying different input data.

3.5 What are authorization assignments?

In conjunction with a log-in module, which supports logging-in to directory services or Single Sign-On systems, an authorization assignment supports the assignment of authorizations in TT Knowledge Force to groups and individual users from these external systems.

To recognize external groups and users, TT Knowledge Force uses the login module-specific names of the respective objects. In the case of the LDAP login module, this is the Distinguished Name (DN) of the LDAP group or of the LDAP user. Other login modules may use other identifiers. Please refer to the documentation for the respective login module for a description of the specific group and user names.

3.6 How to search for an authorization assignment



» To search for external group assignments, you first need to switch over to the **Settings** task.

» Start by selecting the **Define external group assignments** entry.

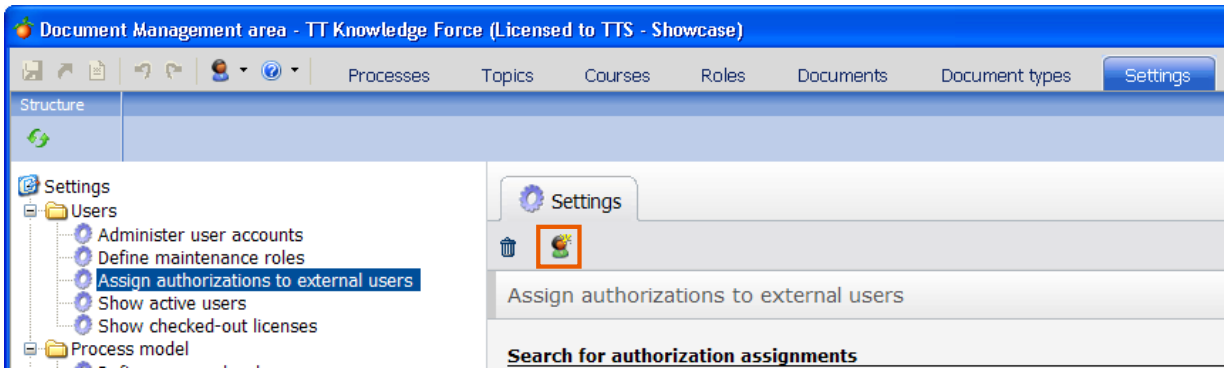
The right half of the screen now allows you to search for assignments, add new assignments, or edit/delete existing assignments.

To search for an assignment, enter the appropriate search term into the **Name** search field. Use an asterisk ***** as a wildcard.

» In this example, search for the word ***Analyst***.

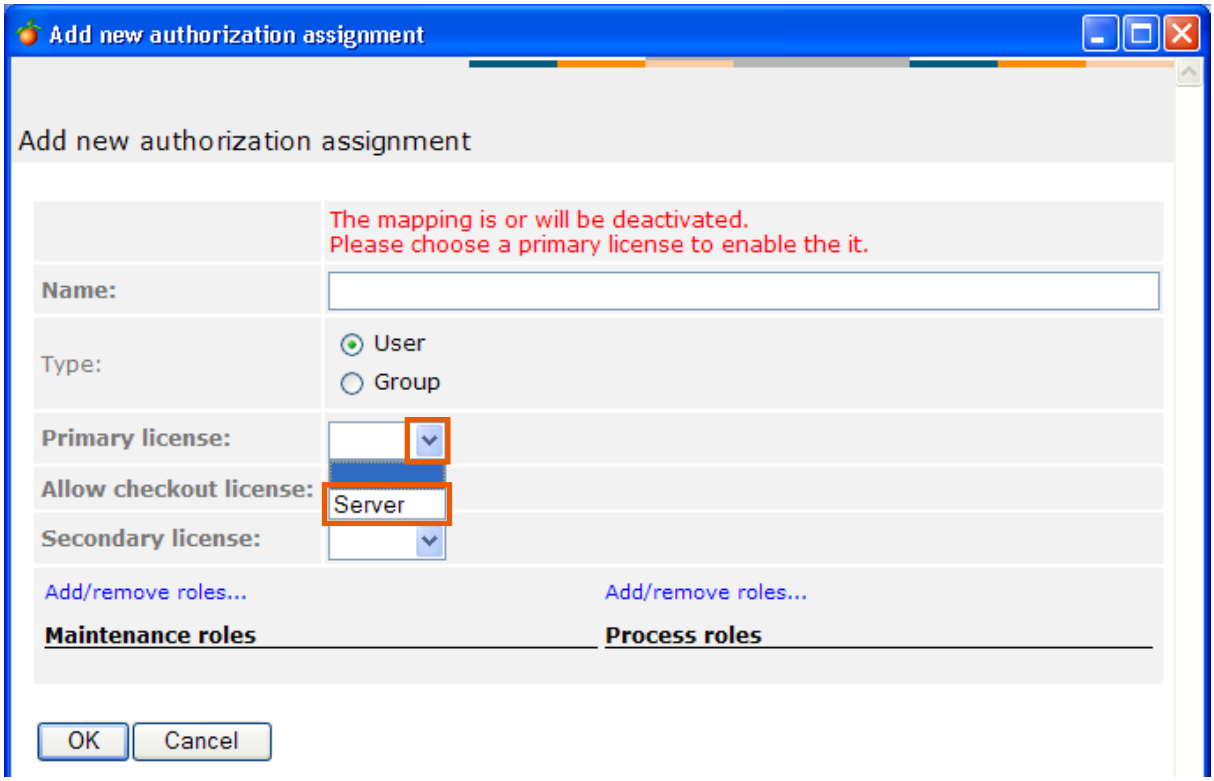
» Start the search via the **Search** button.

3.7 How to create a new authorization assignment



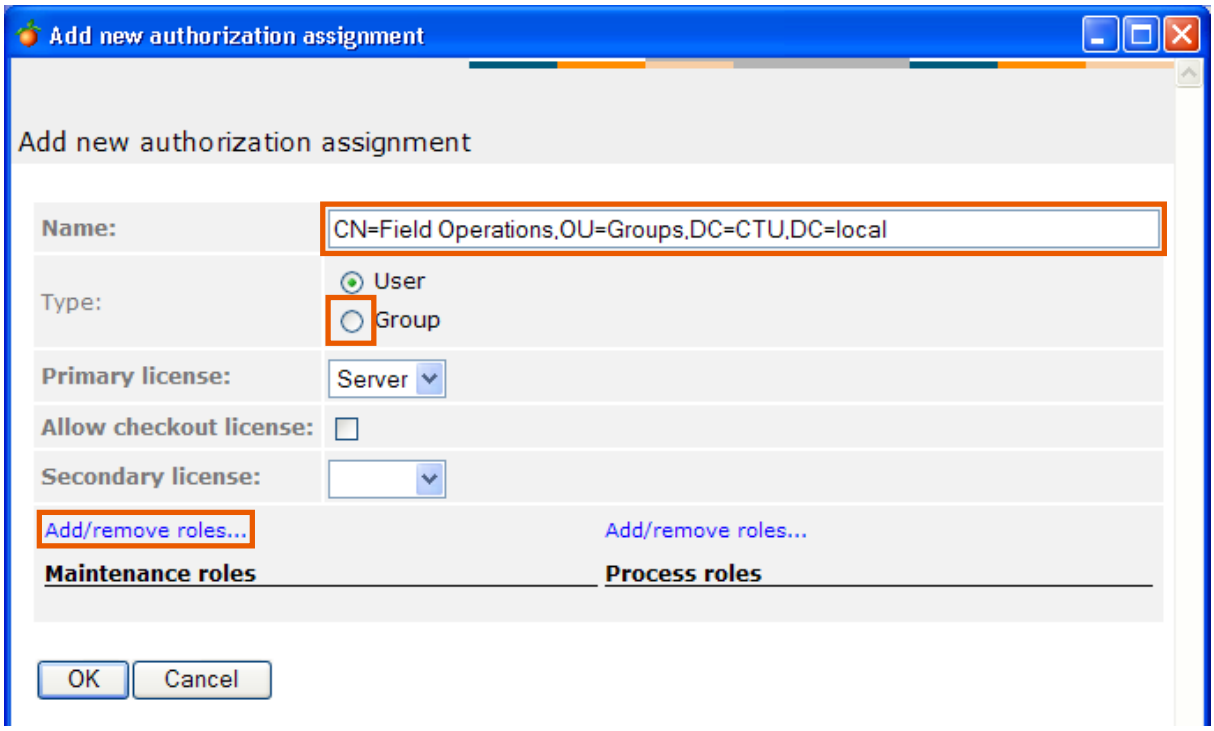
» Click the **Add new external group mapping...** icon.

First, you'll have to specify a License to enable the mapping. Make sure to specify at least a primary license. A secondary license is optional.



» Open the dropdown button next to **Primary license**.

» Select a license from the dropdown list. In the example, this is the **Server** list item**.**

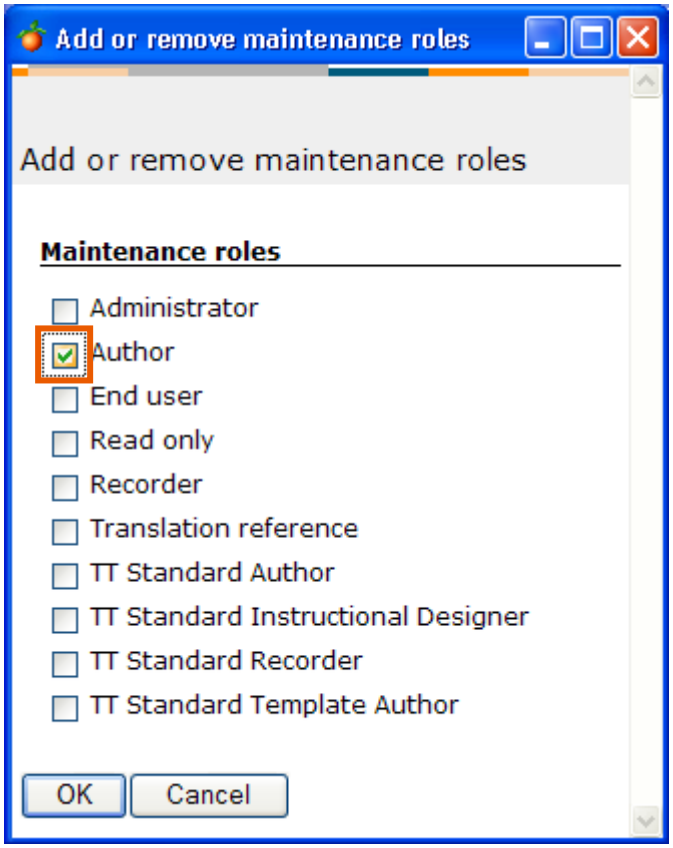


Next, enter the login module-specific name of the group or user into the **Name** field. In the case of the LDAP login module, this is the Distinguished Name (DN) of the respective entry in the LDAP directory.

» In this example, enter: **CN=Field Operations,OU=Groups,DC=CTU,DC=local** into the **Name** field.

» Specify the type of group assignment. In this example, please select **Group**.

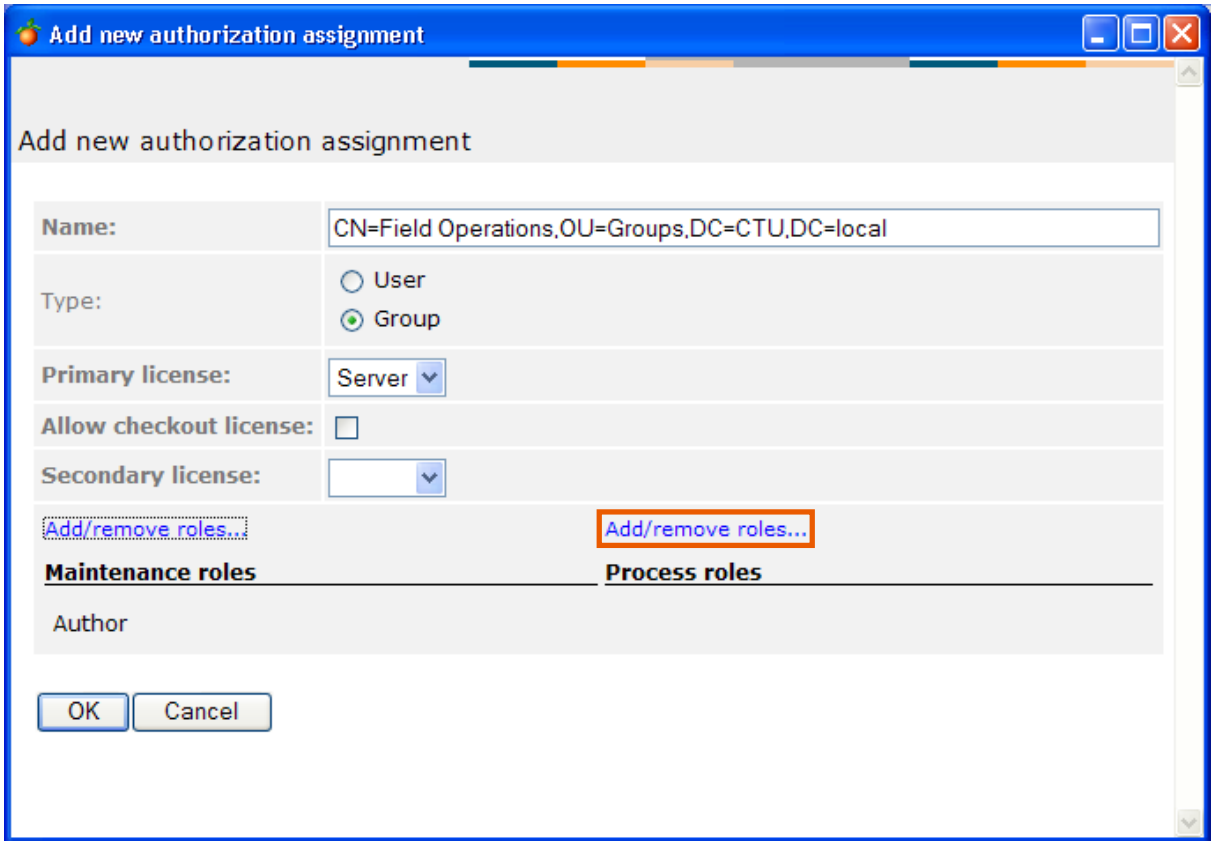
» Assign maintenance roles to the group or user name by clicking **Add/remove roles...** just above the **Maintenance roles** area.



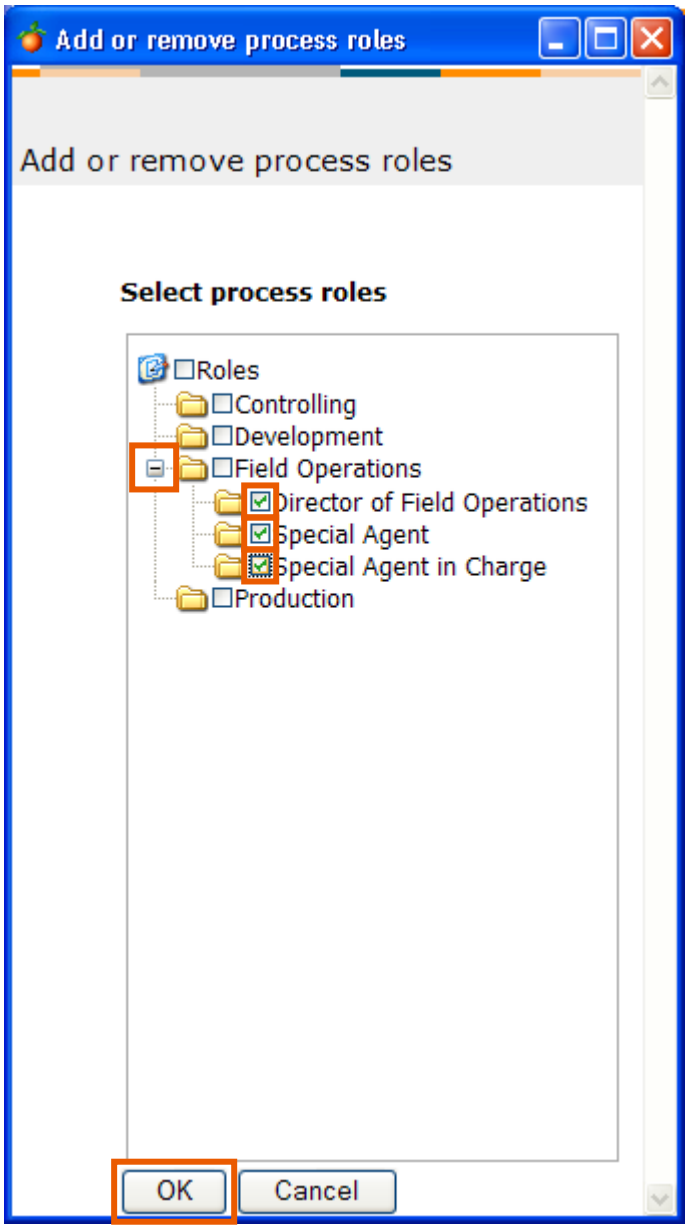
Select one or more maintenance roles from the list and confirm your choice with **OK**.

» Select one or more maintenance roles. In this example: **Author**.

» Confirm your selection with **OK**.



» Assign process roles to the group or user name by clicking **Add/remove roles...** just above the **Process roles** area.

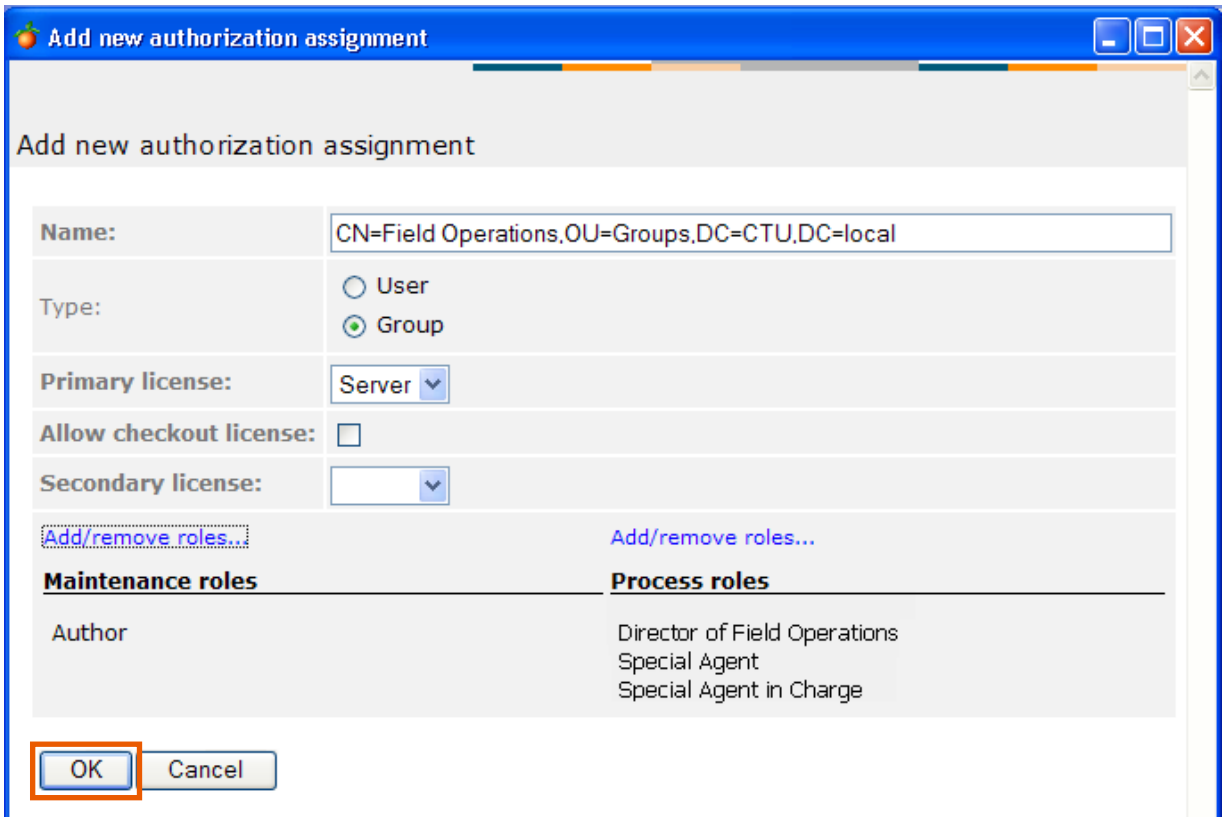


Select one or more process roles. In this example:

» Open the **Field Operations** folder.

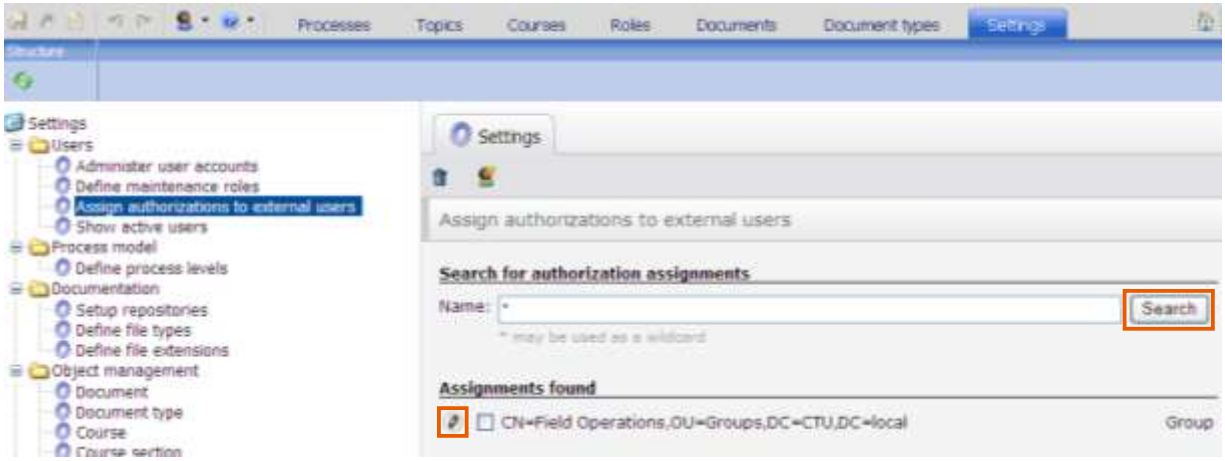
» Select the three **process roles** included in the folder.

» Confirm your selection via the **OK** button.



» Confirm the settings made via the **OK** button.

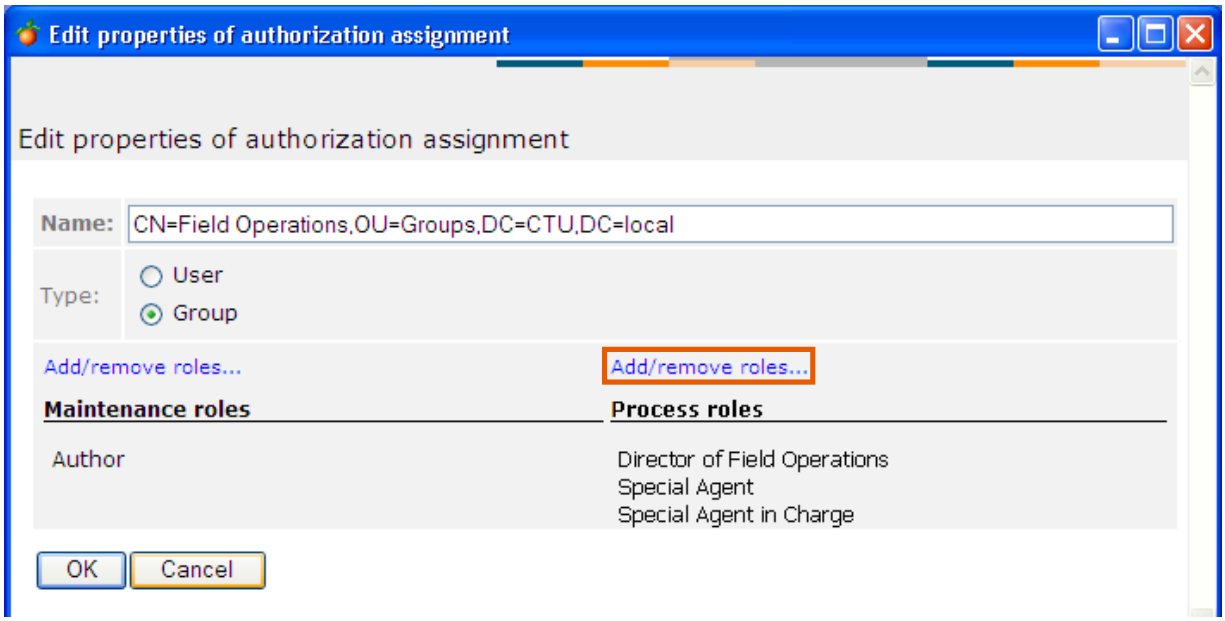
3.8 How to edit an authorization assignment



Start by searching for the external group assignment that you want to edit.

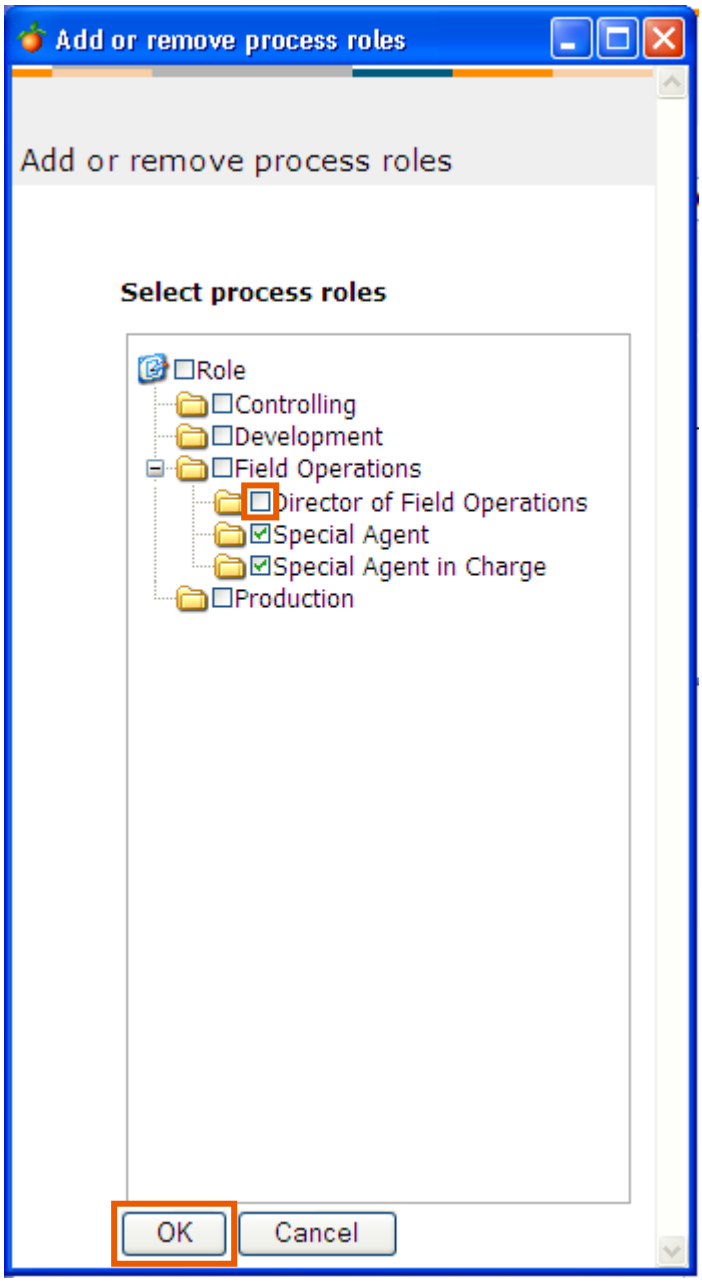
If you enter an asterisk (*****) as your search term, the search results will display all external group assignments.

» To edit one of the external group assignments, click the appropriate **Edit properties** button.



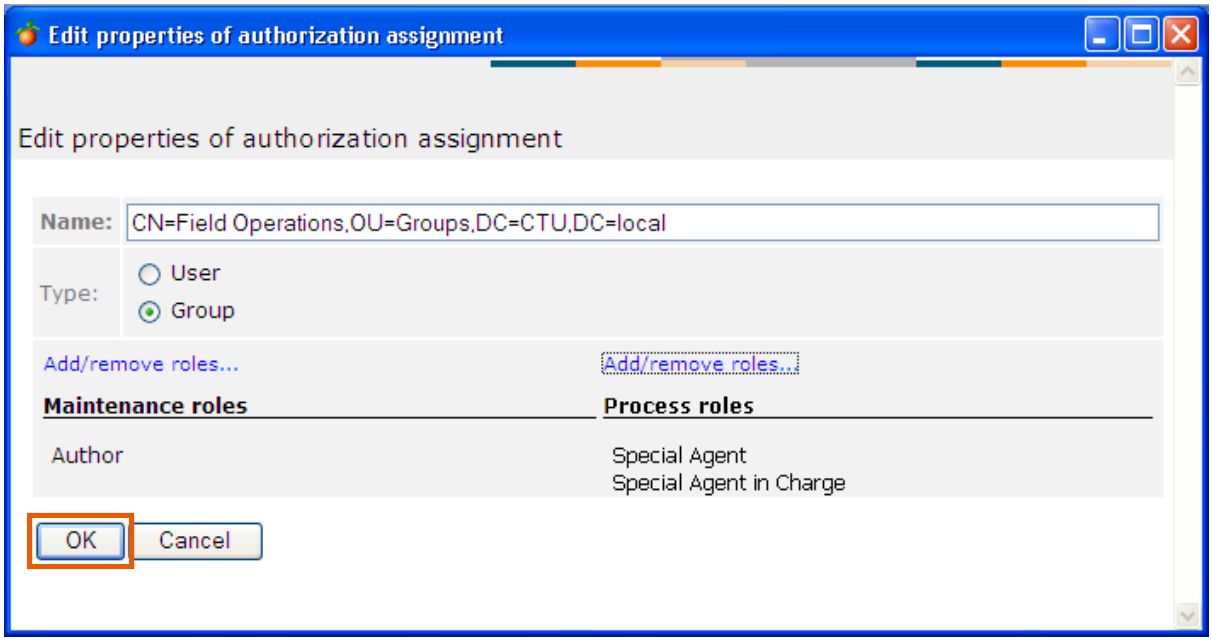
This dialog allows you to edit the properties of the external group assignment.

» In this example, change the assignment of process roles by clicking **Edit mappings...** just above the Process roles area.



» Proceed with this example by removing the **Director of Field Operations** process role from the selection list. To do so, remove the appropriate checkmark.

» Confirm your changes via the **OK** button.



As expected, the particular process role has been removed.

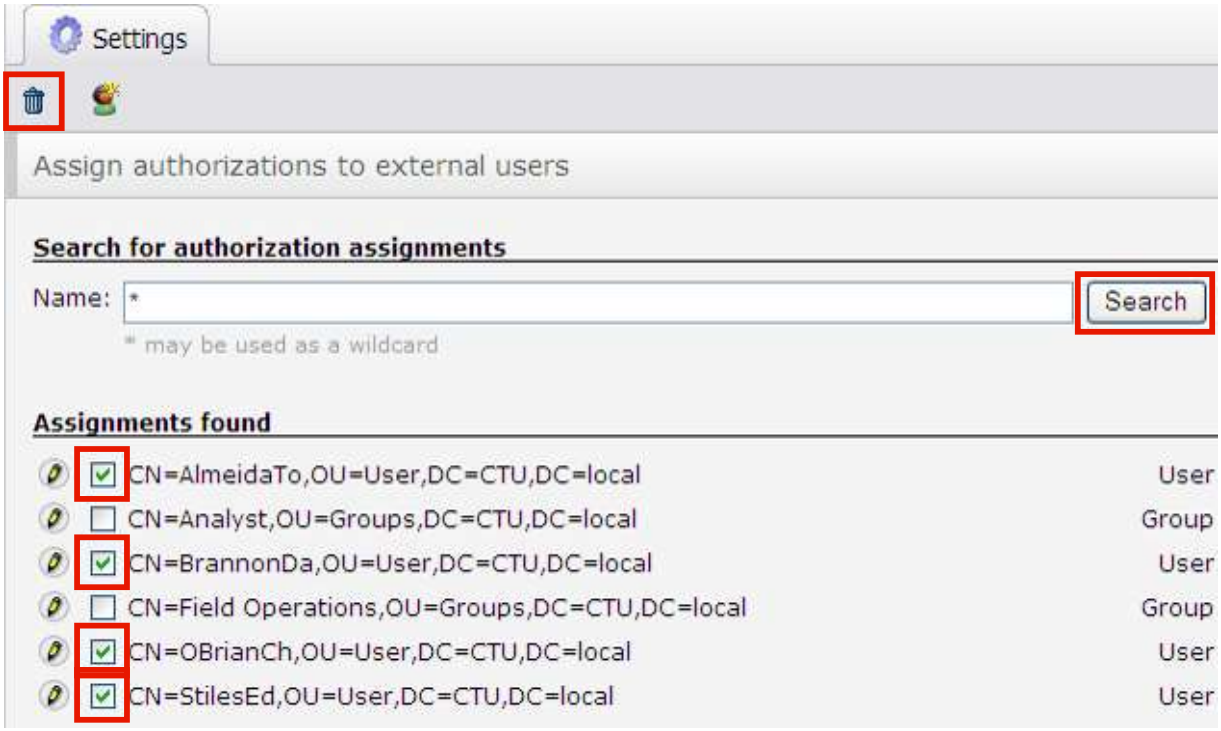
» Conclude your editing activities by clicking the **OK** button.

3.9 How to delete an authorization assignment

Start by searching for the authorization assignments that you want to delete.

If you enter an asterisk (*****) as your search term, the search results will display all authorization assignments.

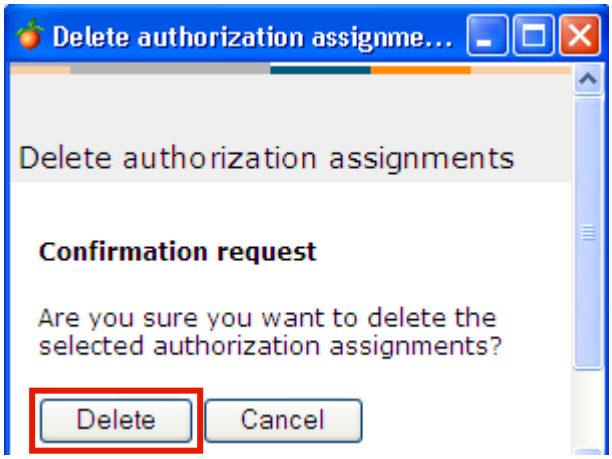
» Click the **Search** button.



Now select the authorization assignments that you want to delete from the search results.

» In this example, select the checkboxes for the first, third and last two search results.

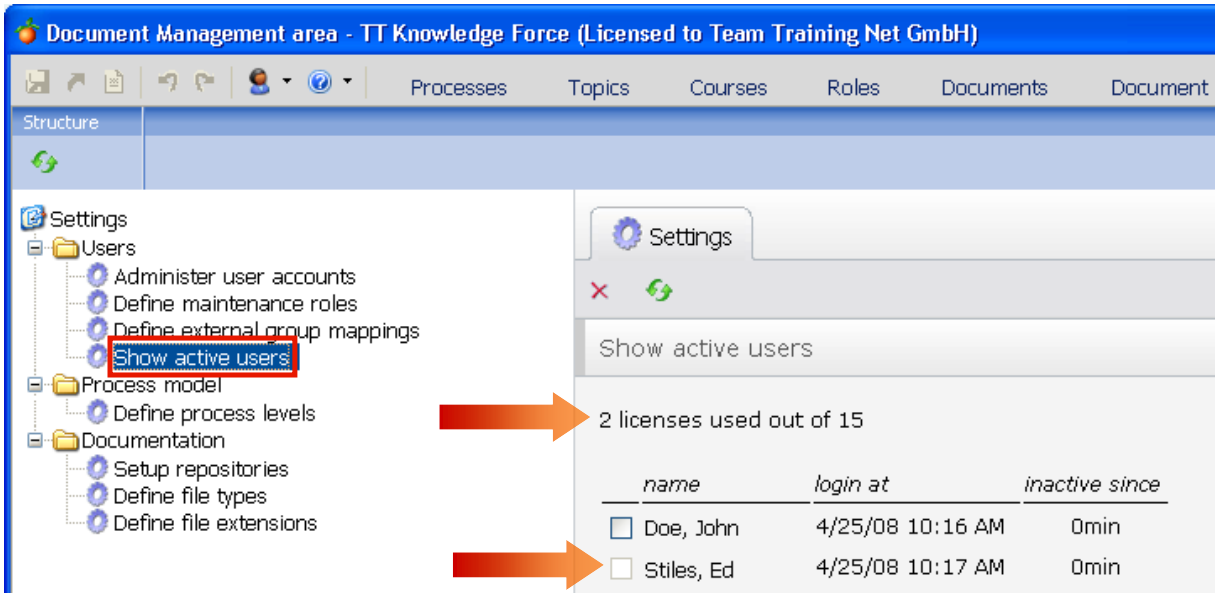
» To delete the selected assignments, click the **Delete selected...** button.



» To permanently delete the selected assignment, confirm the confirmation prompt via the **Delete** button.

3.10 How to display the active users

» To display the list of active users, click the **Display active users** entry.

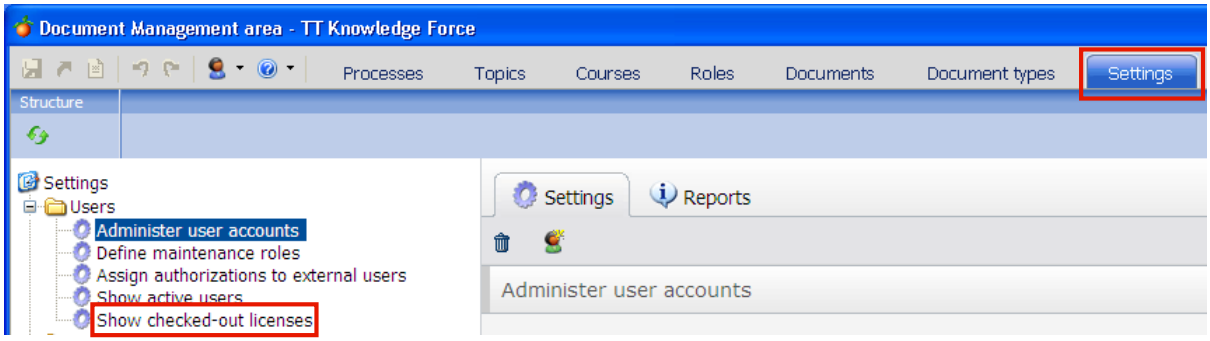


The list of active users shows all users that are currently logged on. It also shows how many of the existing licenses are in use.

The **Close selected user session...** button allows the administrator to log-out users. Since it is impossible to log oneself out, one person in the list is usually unselectable (checkbox is inactive).

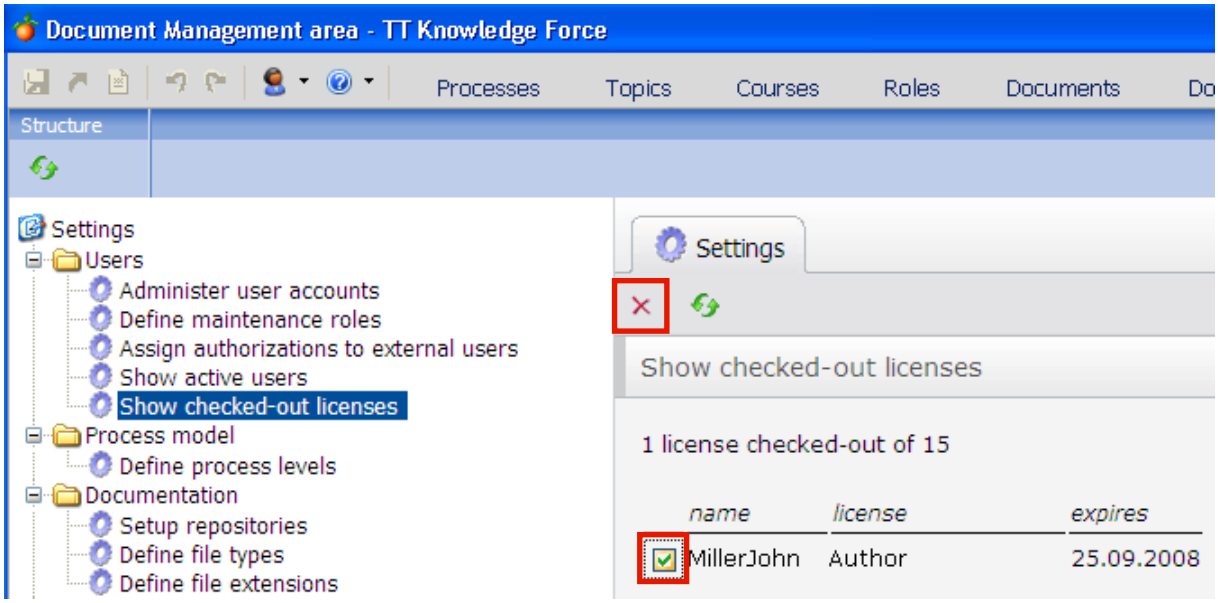
3.11 How to display all checked-out licenses

To quickly get an overview how many users have currently checked-out a license (thus diminishing the total number of licenses currently available to other users on the server), the administrator can use a dedicated list:



» Click the **Settings** tab.

» Click the **Show checked-out licenses** hyperlink.



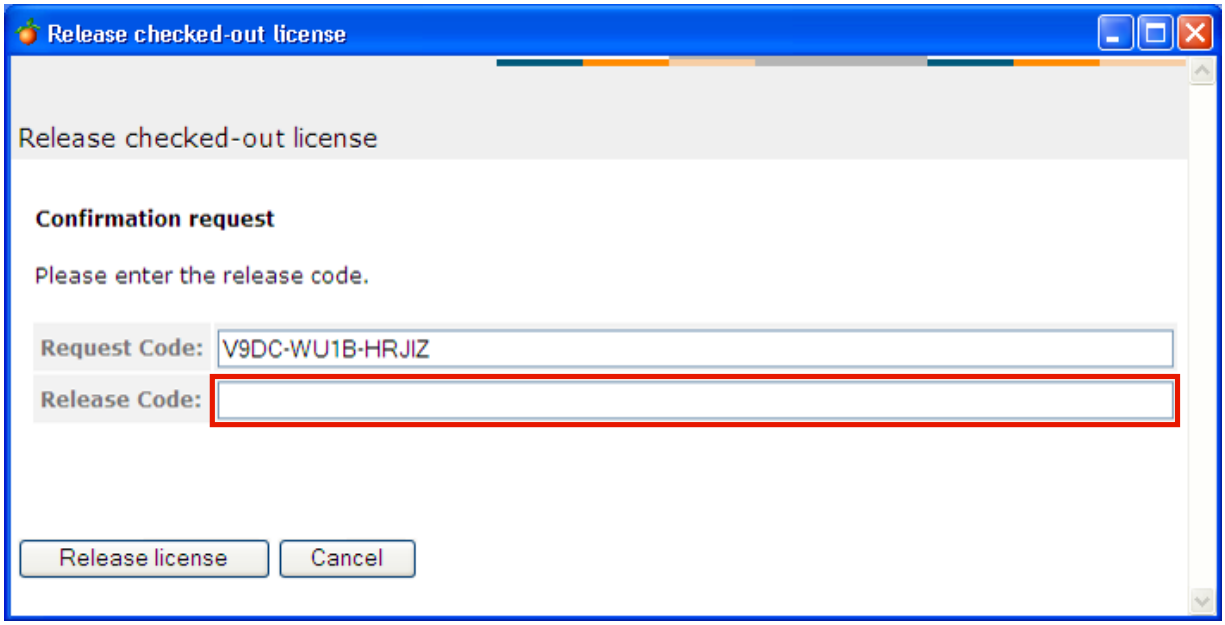
All users who have currently checked out a license will be listed. In the example, only one user has done this.

To enable a user to check out a license, the corresponding checkbox "Allow checkout license" must be enabled in the user profile. Please refer to the "How to administer user accounts" section.

How to release a license that a user forgot to check back in:

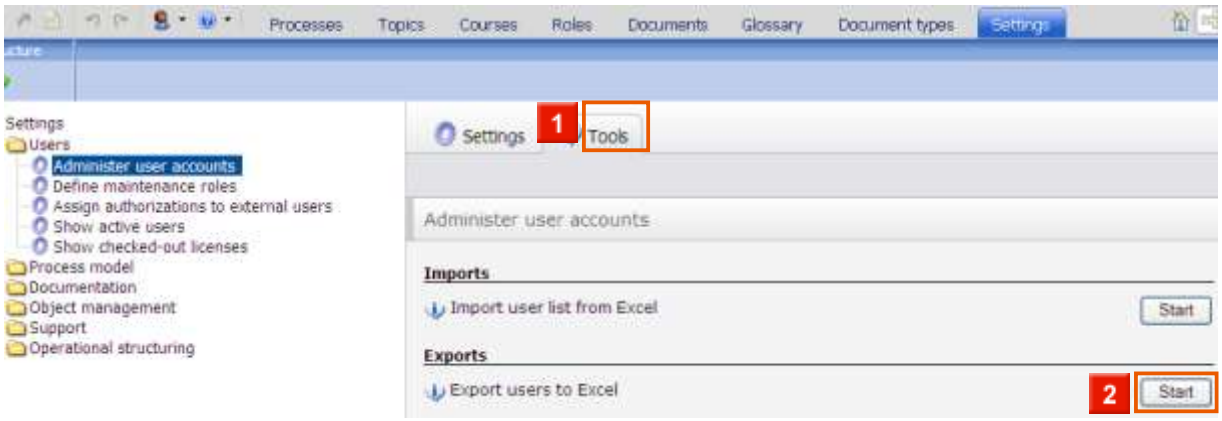
» Click the **checkbox** of the user whose license you want to "free".

» Click the **Release chosen license ...** button.



To avoid possible fraudulent use, the release feature only works after a **Release Code** has been entered. In order to get such a code, please contact TTS support, specifying the given **Request Code**. Then, click on the Release license button to force the selected user's license to be released.

3.12 How to export user account data to Excel



» 1 Click the **Tools** tab.

» 2 Click the **Start** button.

Export user to Excel
Export user to Excel
1
User export
Here you can export all local users to one Excel file, which can be saved or edited and re-imported via user import. The corresponding configuration file is provided as well. Please note that for security reasons, user passwords will not be included in the exported file.
Click the next button to start exporting the users.
< Back
1
Next >
Cancel

» 1 Click the **Next >** button.

Export user to Excel
Export user to Excel
2
User export
Here you monitor the current status of the export. Once the export has finished, you can download both the export file and its corresponding configuration file.
Download export file
Download configuration file for re-import
Close

Once the export files have been generated, you can click the hyperlinks to open or save those files.

Please note that two files are generated during the export process:

1. the actual **export file** (Excel format, *.xls)
2. the corresponding **configuration file**.

Both files are necessary for a proper import procedure: While the Excel file contains the user and account data in a structured way, the configuration file defines the exact data structure of the Excel list. Therefore, you may always want to download both files.

Sample files can be found as a zipped archive in the program's installation folder at */contrib/importsamples/excel-import-examples*

4 Workflow maintenance

4.1 How to define a workflow

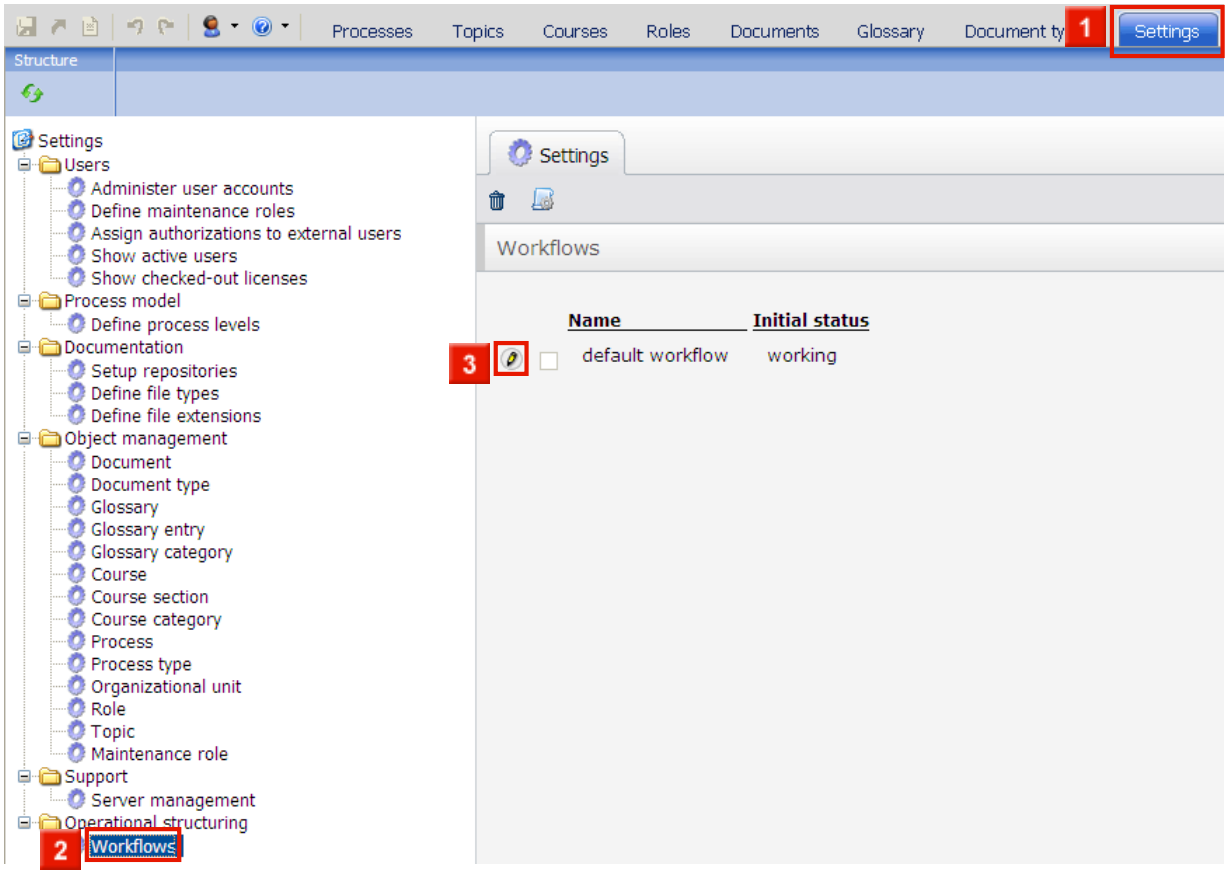
4.1.1 The workflow concept

With the Workflow administration settings, you define the workflow of all documents stored on the Workbench. You can define all existing statuses and the way they interact.

A basic model of a workflow would look something like this:

- Planning (as an initial status, here referred to as an entry status).
- Work in progress (while documents are being edited).
- Quality Management (as the status following the 'Work in Progress' state. Documents may be rejected in this state, thus brought back to the Work in progress state, or promoted to the Released state).
- Released (as a final state: all released documents are set to be visible to end-users).

All workflow settings are made on the Settings tab:



» 1 Click the **Settings** tab.

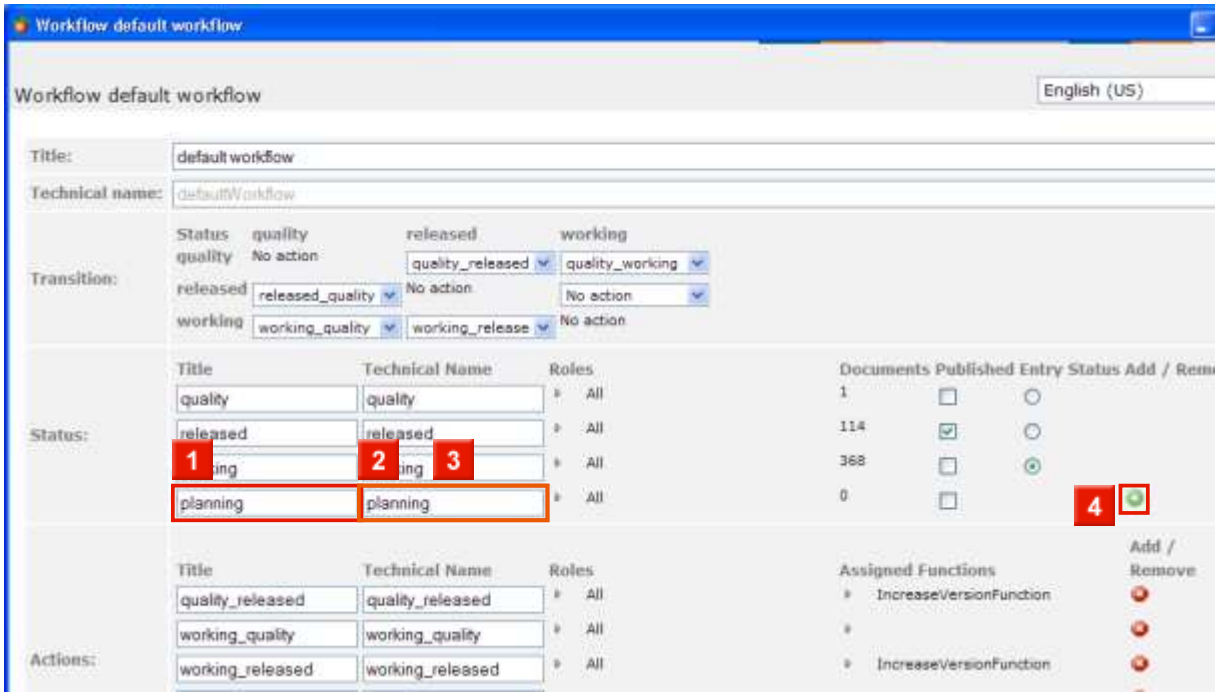
» 2 Click the **Workflows** menu item.

Let's assume that you'd like to alter the default workflow that is already contained in the set-

up. Alternatively, you could create a workflow from scratch by clicking the **Add new workflow** button.

If need be, you can delete a custom workflow by selecting it and clicking the **Delete workflow** button. Please note that you cannot delete the default workflow.

» 3 Click the **Edit Workflow** button.



The default workflow is now shown. Basically, a workflow must contain entries for the following categories:

- Status
- Actions

The actions defined can then be used to create valid transitions from one state to another.

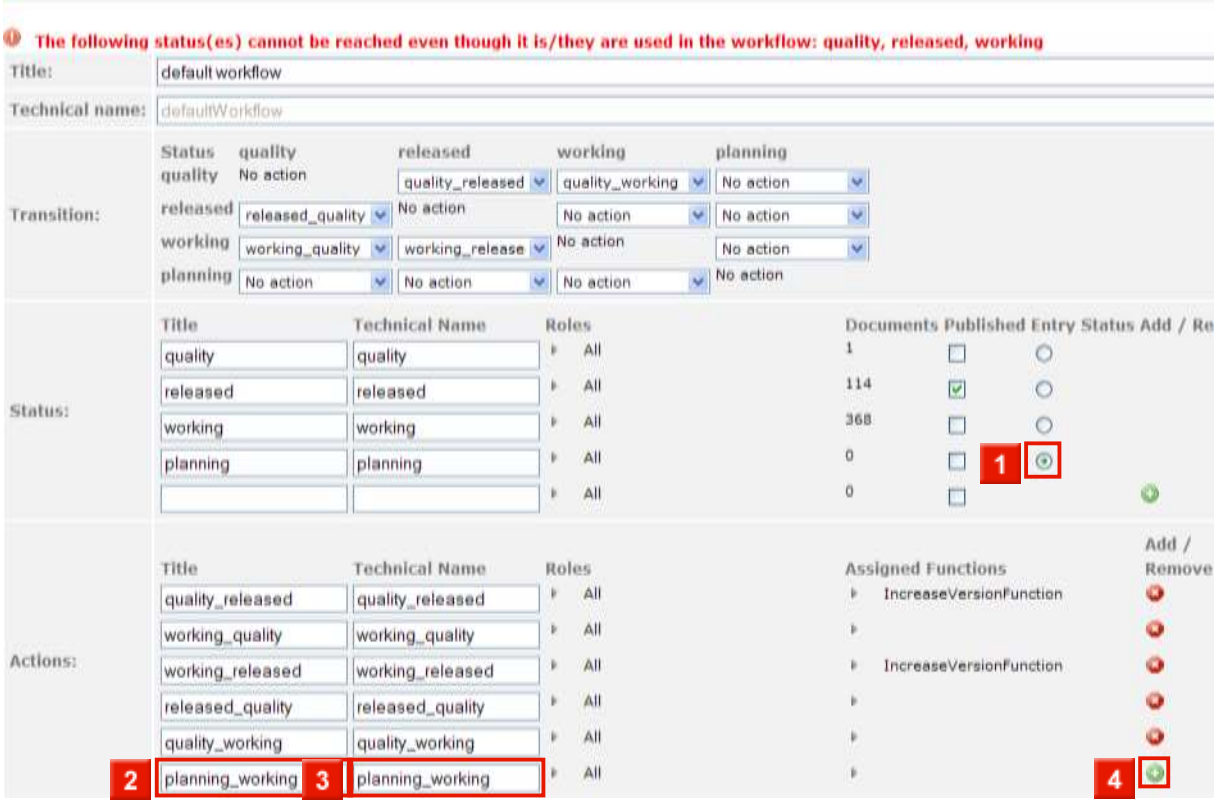
» First, place the cursor in the empty **Title** input field next to Status.

» 1 Enter **planning** as a **Title**.

» 2 Click the **Technical Name** input field.

» 3 Enter **planning** into the **Technical Name** field.

» 4 Click the **Add** button.


The following status(es) cannot be reached even though it is/they are used in the workflow: quality, released, working
Title:
default workflow
Technical name:
defaultWorkflow
Transition:
Status quality released working planning
quality No action quality_released quality_working No action
released released_quality No action No action No action
working working_quality working_release No action No action
planning No action No action No action No action
Status:
Title Technical Name Roles Documents Published Entry Status Add / Re
quality quality All 1
released released All 114
working working All 368
planning planning All 0
All 0
1
Actions:
Title Technical Name Roles Assigned Functions Add / Remove
quality_released quality_released All IncreaseVersionFunction
working_quality working_quality All
working_released working_released All IncreaseVersionFunction
released_quality released_quality All
quality_working quality_working All
2 planning_working 3 planning_working All 4

TT Knowledge Force automatically detects inconsistencies in the workflow. With the current settings, the "Planning" status would be useless, as it is not linked to the workflow in any way. This can be changed by making the 'planning' status the **Entry status** of the workflow.

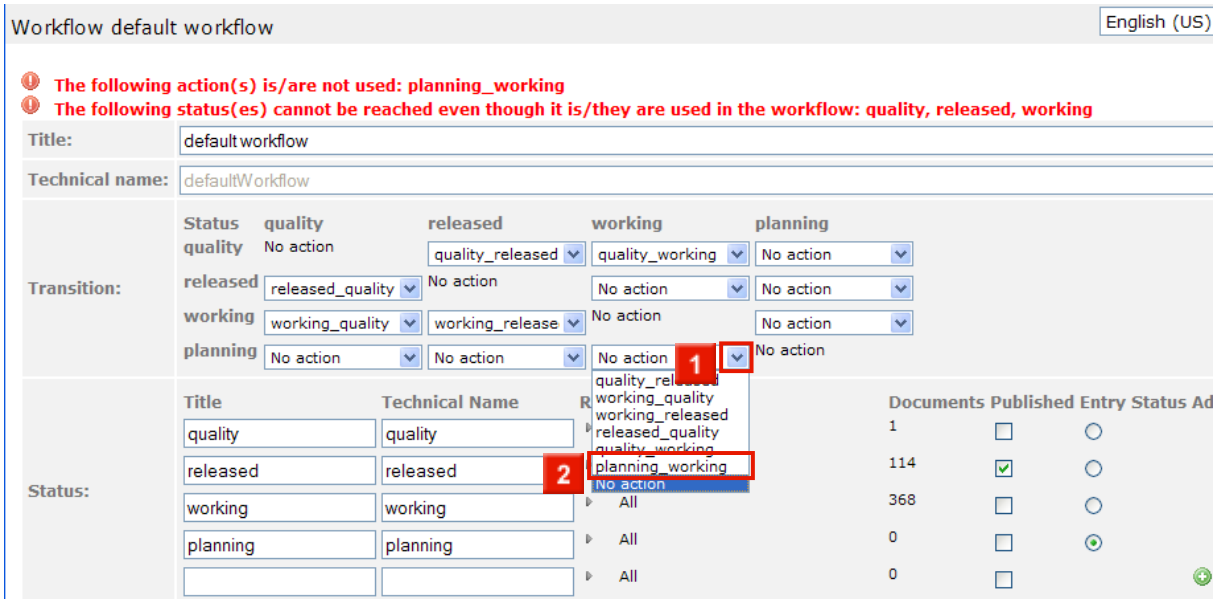
» 1 Click the **Entry status** radiobutton.

As a consequence of the change to the entry status, a new inconsistency has now arisen, due to the fact that there is currently no action defined to promote a document from the planning status to any other status.

» 2 Fill in the **Actions: Title** field (example: planning_working).

» 3 Fill in the **Actions: Technical Name** field (example: planning_working).

» 4 Click the button.



The new Action can now be used in the 'Transition' matrix to make it possible to promote a document that is in the 'Planning' state to enter the 'working' state.

The 'Transition' matrix contains the source states in the very first column, whereas the possible target states can be found in the upper row. In order for the "Planning to working"-action to be useful, it is now set for the 'planning' row - 'working' column junction.

» 1 Click the dropdown button.

» 2 Click the **planning_working** list item.

The workflow concept is now fully functional, with an entry state, at least one published state, and enough actions and transitions defined.

Note that there are several transitions marked as "No action". These are either set automatically at the junctions of identical states, or user-defined where a dropdown list is available.

Next, assign a function to the freshly defined 'planning_working' action. This function will be called whenever the action is performed on an object.

» 1 Click the **Assigned Functions** button in the planning_working row.

» 2 Click the **Add function** button.

» 1 Click the dropdown button.

» 2 Click the **NotifyOwnersFunction** list item.

The Assigned Functions explained:

CleanupVersionsFunction: all superfluous versions of a document will be deleted upon calling the function. The only versions that are retained are: any version that ever was in a 'published' state, as well as all versions that are newer than the last published version.

IncreaseVersionFunction: by performing the action, the document version is increased by a version, while the document revision is set to the default value. For example, if the "quality_released" action is performed for a document that was version 2.3, the document version will be 3.0 afterwards.

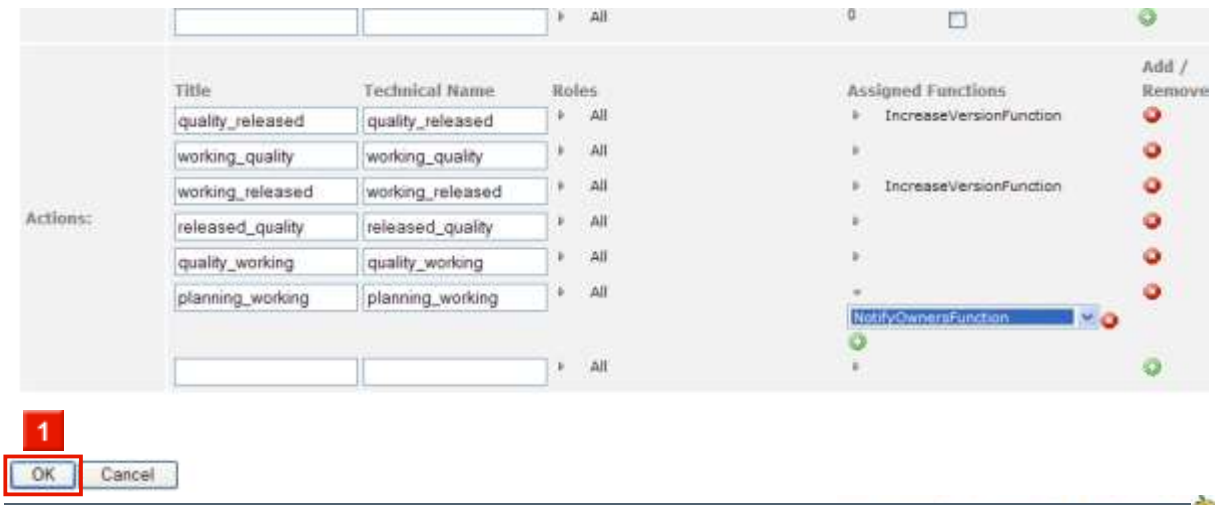
NotifyOwnersFunction: the document owner and assignees will receive an e-mail if the action is performed for one of their documents.

NotifyOwnerOnlyFunction: only the document owner (not the assignees) will receive an e-mail if the action is performed for one of their documents.

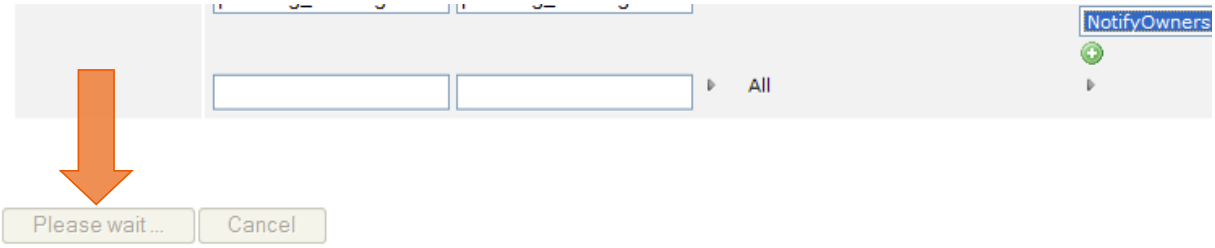
NotifyAssigneeOnlyFunction: only the document assignees (not the owner) will receive an e-mail if the action is performed for one of their documents.

NotifyRoleMembersTargetState: all persons who are in charge of documents in the target state will be notified once a document enters the new state.

RevokePublishingFunction: upon calling this function, the document will no longer appear in the portal until a new version is published. A use case would be a status change to an "obsolete" state.



» 1 Click the **OK** button.

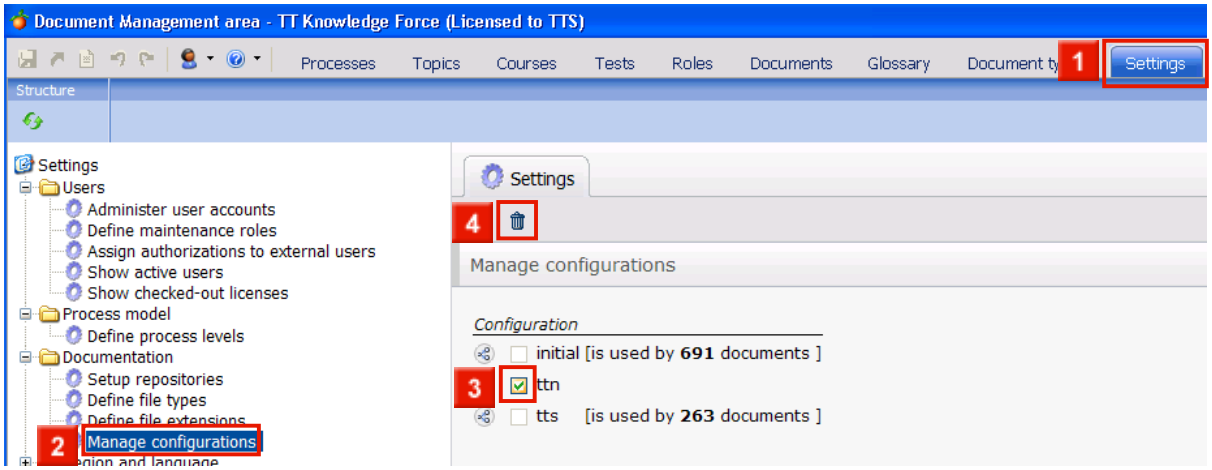


Updating workflow settings may take some time, especially if a large number of documents are affected by the changes. Please be patient.

5 Configuration management

5.1 Managing multiple configurations

With Design Manager enabled, the server can handle multiple configurations. Via the **Settings > Manage configurations** tree entry, you can check which configurations currently exist on the server. If need be, you can also delete unused configurations:



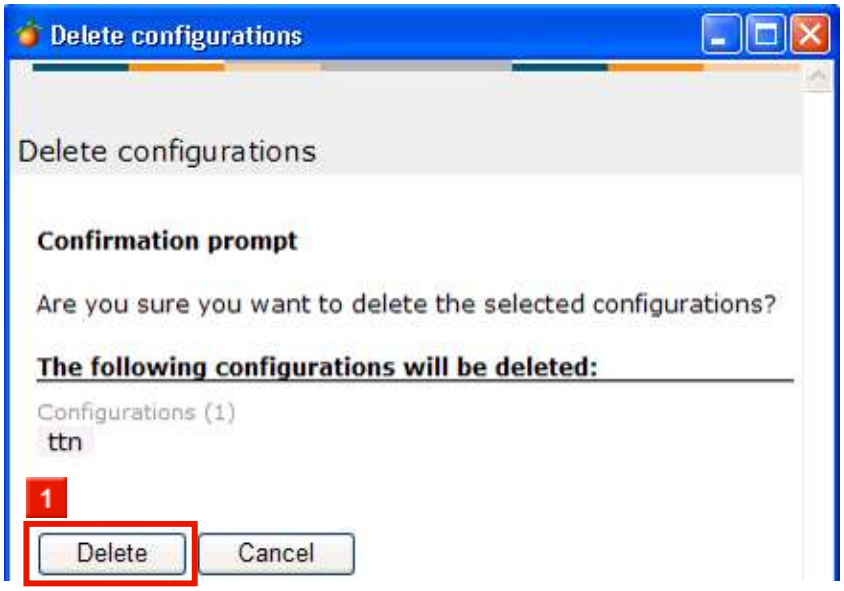
» 1 Click the **Settings** tab.

» 2 Click the **Manage configurations** tree entry.

As you can see, there are currently three different configurations on the server. The "ttn" configuration is not used by any documents, so you can delete it:

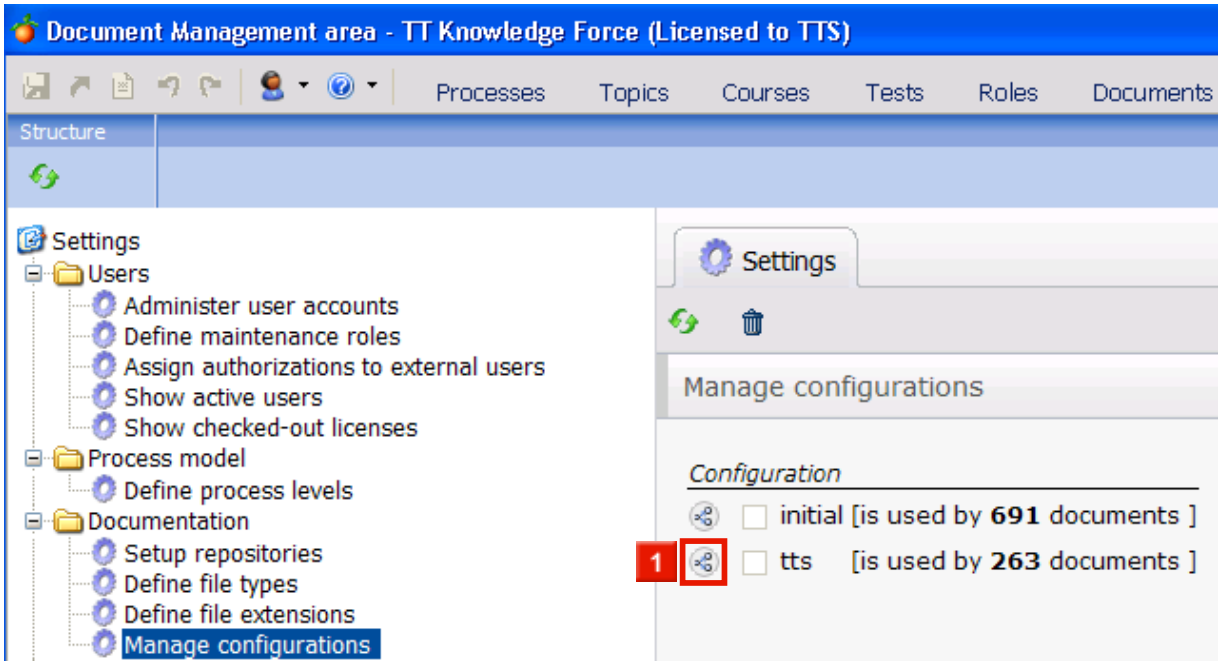
» 3 Click the ☐ checkbox next to **ttn**.

» 4 Click the **Delete selected...** button.



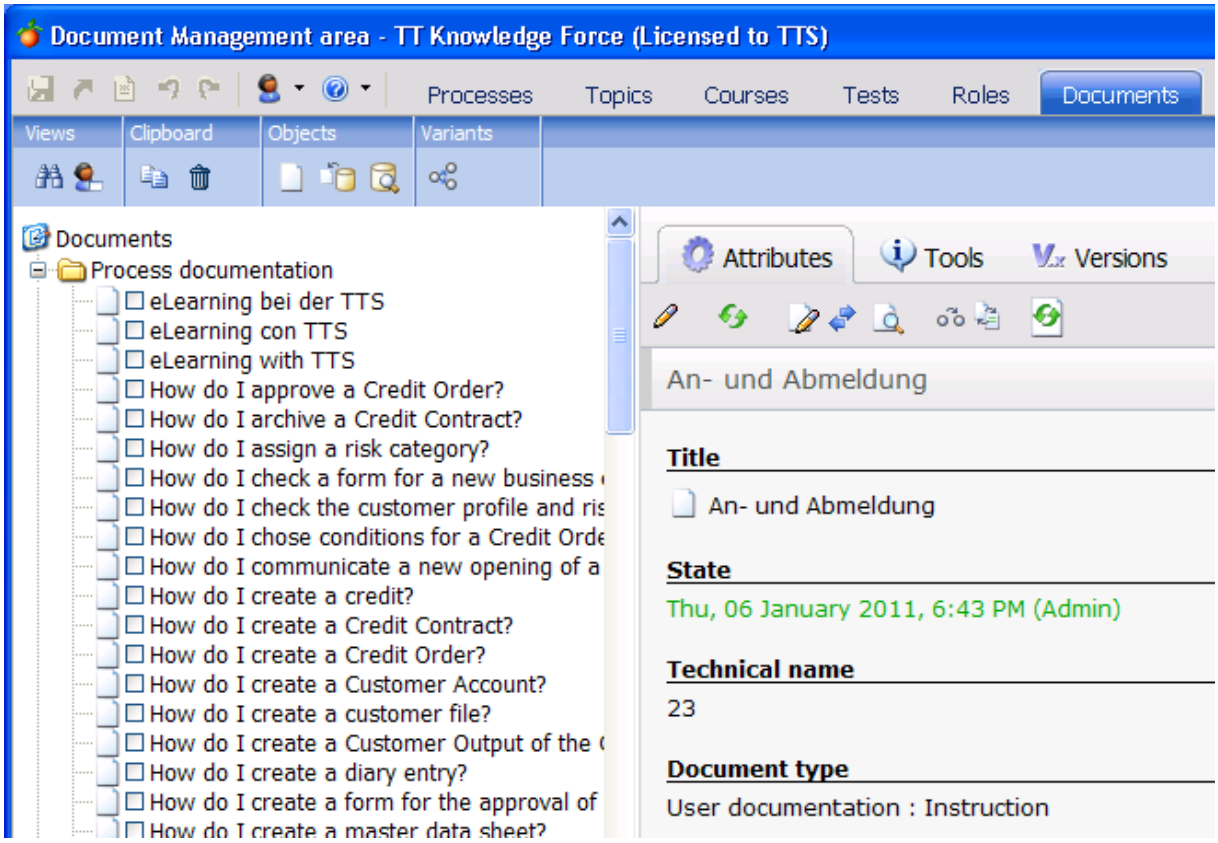
You are prompted to confirm that you really want to delete the unused configuration. Continue by clicking "Delete".

» 1 Click the **Delete** button.



The configuration has been deleted.
As noted, you cannot delete a configuration as long as there are documents that use it.
To quickly list all documents that use a given configuration, you can avail of this button in front of the configuration in question:

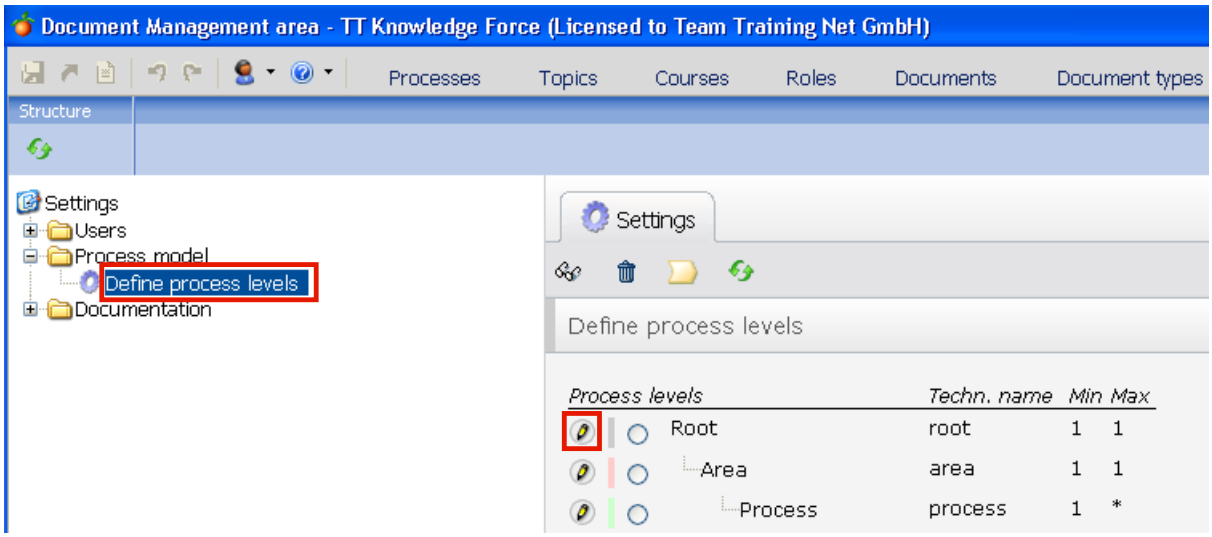
» 1 Click the **Show assigned documents as search result...** button.


Document Management area - TT Knowledge Force (Licensed to TTS)
Processes
Topics
Courses
Tests
Roles
Documents
Views
Clipboard
Objects
Variants
Documents
Process documentation
eLearning bei der TTS
eLearning con TTS
eLearning with TTS
How do I approve a Credit Order?
How do I archive a Credit Contract?
How do I assign a risk category?
How do I check a form for a new business
How do I check the customer profile and ris
How do I chose conditions for a Credit Orde
How do I communicate a new opening of a
How do I create a credit?
How do I create a Credit Contract?
How do I create a Credit Order?
How do I create a Customer Account?
How do I create a customer file?
How do I create a Customer Output of the
How do I create a diary entry?
How do I create a form for the approval of
How do I create a master data sheet?
Attributes
Tools
Versions
An- und Abmeldung
Title
An- und Abmeldung
State
Thu, 06 January 2011, 6:43 PM (Admin)
Technical name
23
Document type
User documentation : Instruction

All documents that currently use the selected configuration are now shown as a search result.

6 Creating a process model

6.1 How to edit the logical process levels

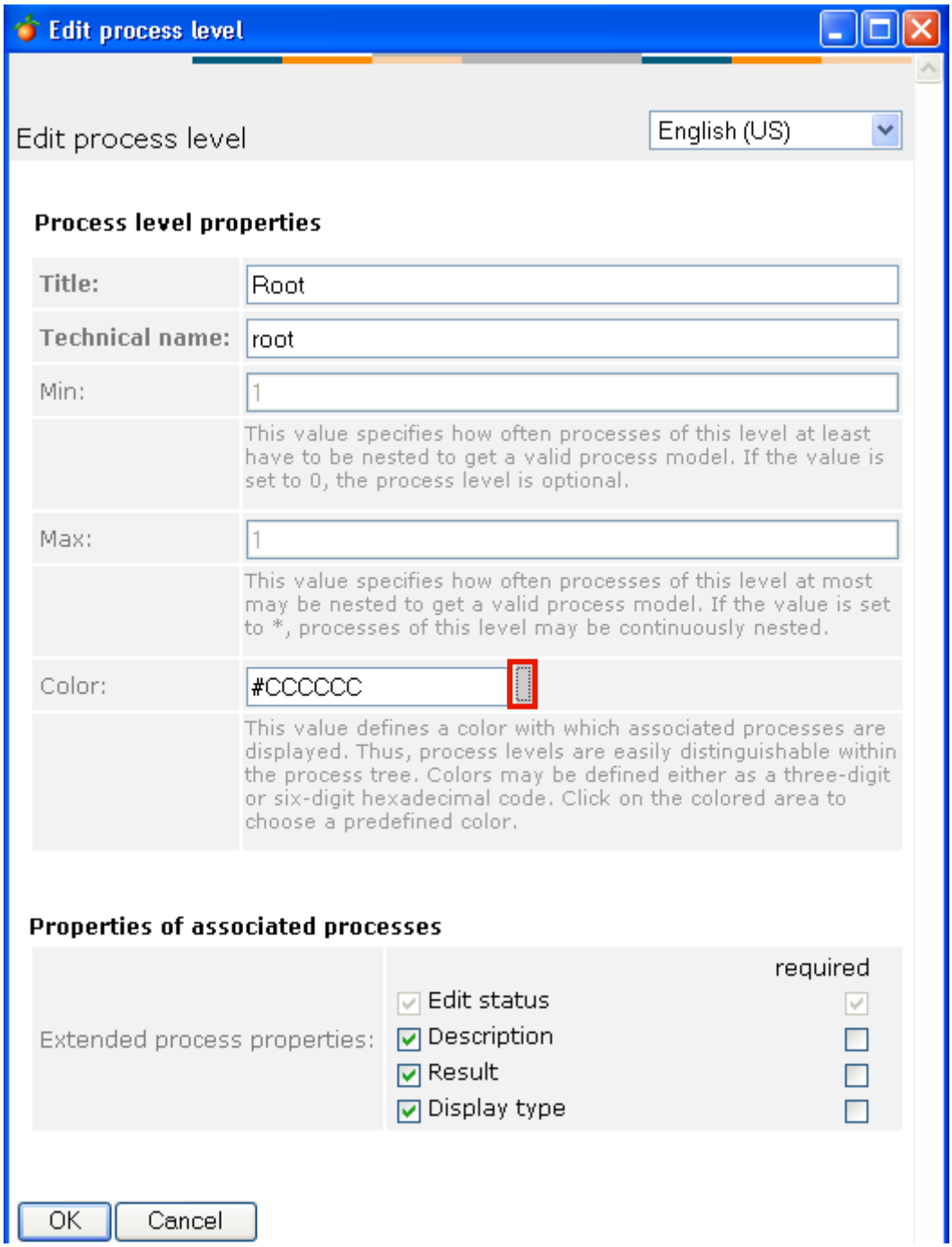


» Click the **Define process levels** tree entry.

The server supports up to 20 logical process levels to which a process can be assigned. In this example, three have been defined - they have the **level names** "Root", "Area" and "Process".

It is always impossible to delete the top process level (the **Root** level in this example). If one of the other process levels is deleted, a dialog prompts you to assign the processses that were previously assigned to the deleted process level to other process levels.

» To edit the properties of a process level, use the **Edit properties...** button for the process level in question. In this example, edit the properties of the **Root** process level.


Edit process level
Edit process level
English (US)
Process level properties
Title:
Root
Technical name:
root
Min:
1
This value specifies how often processes of this level at least have to be nested to get a valid process model. If the value is set to 0, the process level is optional.
Max:
1
This value specifies how often processes of this level at most may be nested to get a valid process model. If the value is set to *, processes of this level may be continuously nested.
Color:
#CCCCCC
This value defines a color with which associated processes are displayed. Thus, process levels are easily distinguishable within the process tree. Colors may be defined either as a three-digit or six-digit hexadecimal code. Click on the colored area to choose a predefined color.
Properties of associated processes
required
Extended process properties:
Edit status
Description
Result
Display type
OK
Cancel

The technical name acts as a unique identifier for the respective process level. It is used in the Publisher, for example, to help depict the process levels with different templates.

The **Min** and **Max** settings are for specifying how often the respective logical level can be nested within the Process tree. Thanks to the nesting option, the Process structure tree can actually contain *more* than seven process levels.

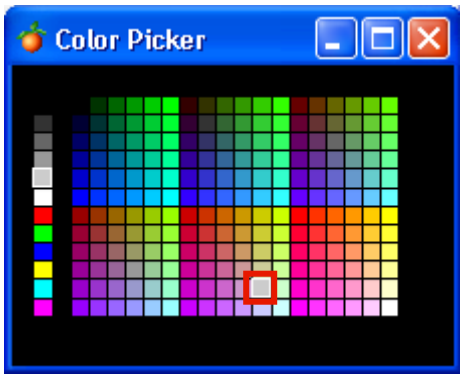
In this example, a *minimum* of 1 nesting has been defined for "Process". This value means that the "Process" level has to appear at least once before the next-deepest level can be selected.

An asterisk (*) has been set as the *maximum* nesting depth for "Process". Consequently, any number of other "Processes" can be created below a process before a "Process step" has to follow.

The following values are supported (*n* stands for any integer > 0):

Min	Max
n Level has to appear at least *n* times	**n** Level can be nested a maximum of *n* times
0 Level can be skipped (optional level)	*** Level can be nested as often as desired

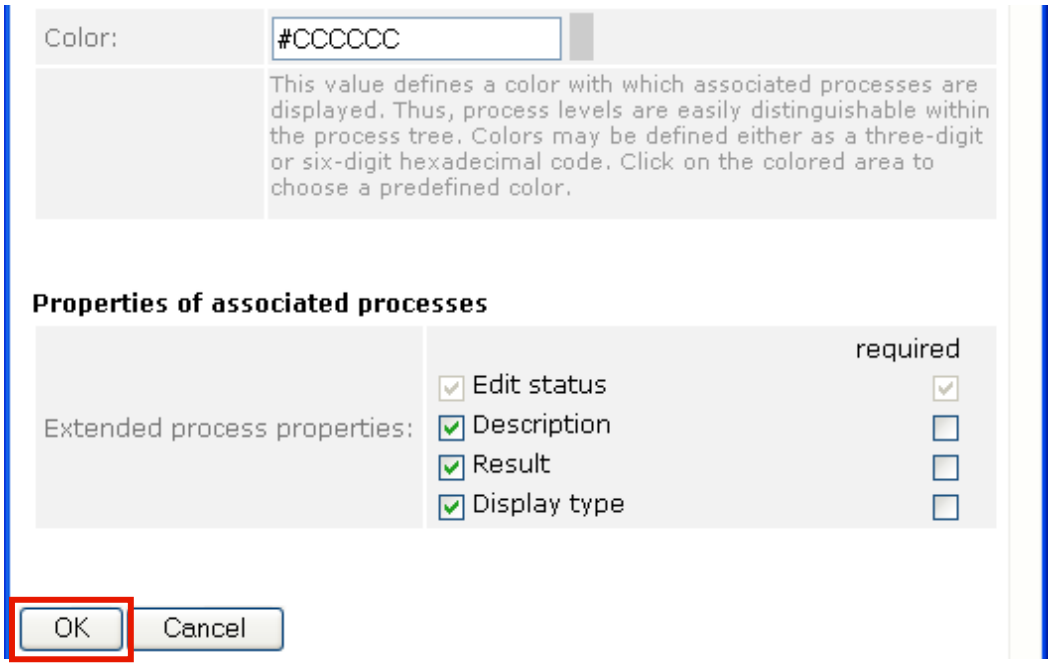
» Click the checkbox next to the **Color** input field.



It's possible to use different **colors** to distinguish between the process levels within the Process tree. To change the color of a process level, simply click the color field in front of the respective level's name and then select a new color in the Color selection dialog.

The color value can also be entered directly as a three-digit or six-digit hexadecimal color code.

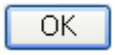
» Select a Color to close the selection window.


Color:
#CCCCCC
This value defines a color with which associated processes are displayed. Thus, process levels are easily distinguishable within the process tree. Colors may be defined either as a three-digit or six-digit hexadecimal code. Click on the colored area to choose a predefined color.
Properties of associated processes
required
Extended process properties:
Edit status
Description
Result
Display type
OK
Cancel

You can define advanced process properties to specify which properties of a particular process are to support editing.

The advanced process properties on offer will vary in accordance with the

respective customer configuration. If you have any questions, please contact your application consultant.

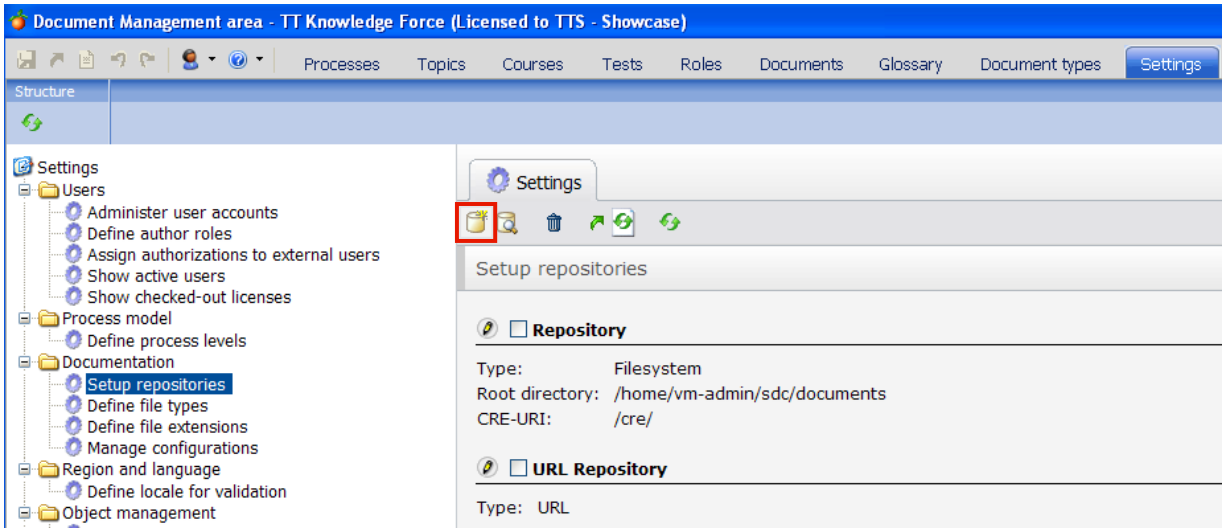
» To close the Process level window, click the  button.

Any subsequent changes to the process level model may result in a situation where the Process structure tree is no longer consistent with the new model. The procedure for recognizing and eliminating such inconsistencies is outlined in the "How to rectify a process model that has become inconsistent due to restructuring" section of the user manual.

7 Documentation management settings

7.1 How to set up a new document repository (file system)

To set up new document repositories, open the **Settings** task and then select the **Setup repositories** tree entry. Then, use the **Add new document repository** button.



The following functions are available when setting up a document repository:

Add new document repository...
This button is for setting up a new document repository.

Repository Explorer
This button is for opening the Repository Explorer in which you can manually assign documents to a file repository.

Remove selected objects from list...
This button allows you to remove the selected objects from the list of document repositories.

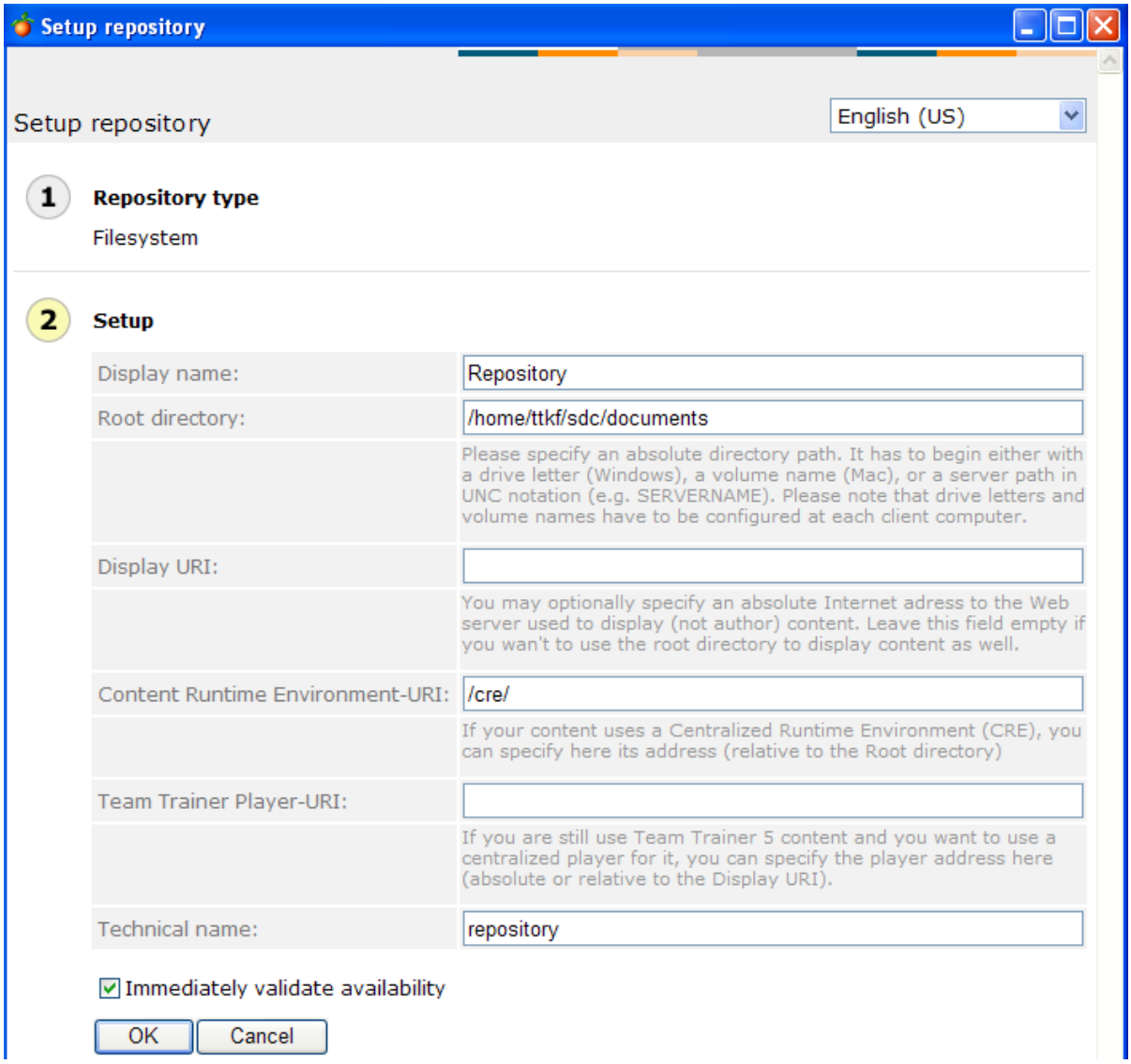
Update Content Runtime Environment...
This button is for starting a dialog in which you can update the Content Runtime Environment.

Refresh
This button refreshes the current view.

» Add a new document repository.

When adding a document repository, the first Wizard step involves selecting the repository type. You can choose between Filesystem, URL or WebDAV.

» Click the **OK** button.


Setup repository
Setup repository
English (US)
1
Repository type
Filesystem
2
Setup
Display name:
Repository
Root directory:
/home/ttkf/sdc/documents
Please specify an absolute directory path. It has to begin either with a drive letter (Windows), a volume name (Mac), or a server path in UNC notation (e.g. SERVERNAME). Please note that drive letters and volume names have to be configured at each client computer.
Display URI:
You may optionally specify an absolute Internet adress to the Web server used to display (not author) content. Leave this field empty if you wan't to use the root directory to display content as well.
Content Runtime Environment-URI:
/cre/
If your content uses a Centralized Runtime Environment (CRE), you can specify here its address (relative to the Root directory)
Team Trainer Player-URI:
If you are still use Team Trainer 5 content and you want to use a centralized player for it, you can specify the player address here (absolute or relative to the Display URI).
Technical name:
repository
Immediately validate availability
OK
Cancel

The second Wizard step is for specifying all settings regarding the document repository.

Please note that the settings shown here are merely sample settings.

Display name

All repository types have a **Display name** field in which a title should be entered for the par-

ticular document repository. This will be displayed when authors wish to switch from one document repository to the other, for example.

The display name can be entered in various languages. Should the need arise, you can change over to a different language via the **language toggle** at the top right-hand corner of the dialog.

The actual repository type determines which other input fields appear.

Root directory
Use this field to specify a folder on the server where the repository is to be stored.

Display URI
This field is for specifying the address of the web server that is to be used for display purposes.

Content Runtime Environment-URI and Team Trainer Player-URI
The Workbench and TT Accelerator support the use of a main Player (Content Runtime Environment) which is deployed to display all Team Trainer simulations. This avoids a situation whereby a separate Player would have to be uploaded for each simulation.

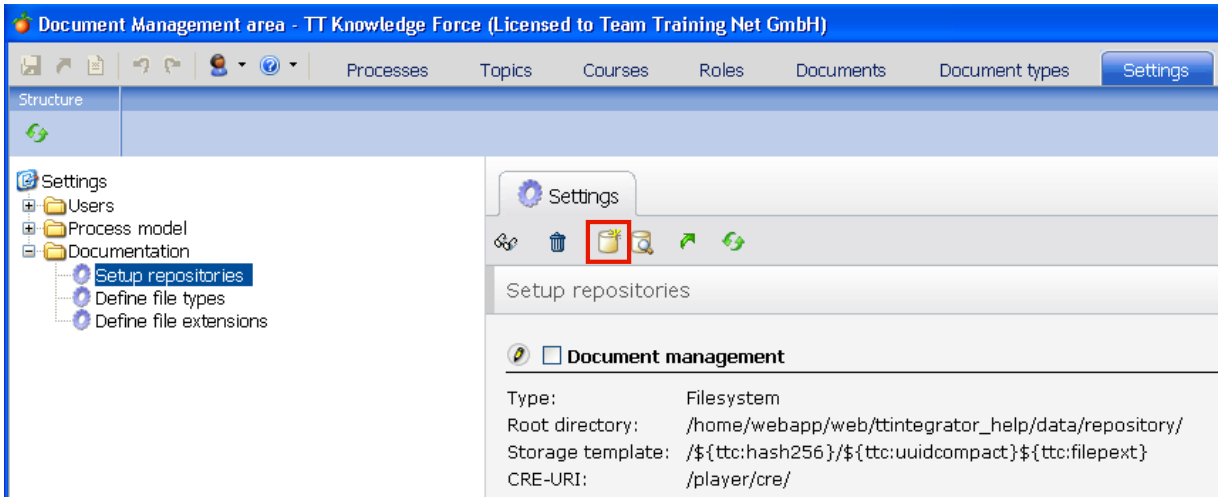
The main Player is stored in a special folder in the document repository – its path is specified via the 'Content Runtime Environment-URI' field.

Each document repository requires its own main Player. This is because the Player is unable to play simulations which are stored on other servers due to JavaScript-related security restrictions (please refer to the "Configuration editing" chapter in the user manual).

Once you have entered all parameters for the repository, click the **OK** button. If you would like to make sure that the paths you defined are accessible, enable the "Immediately validate availability" option before proceeding.

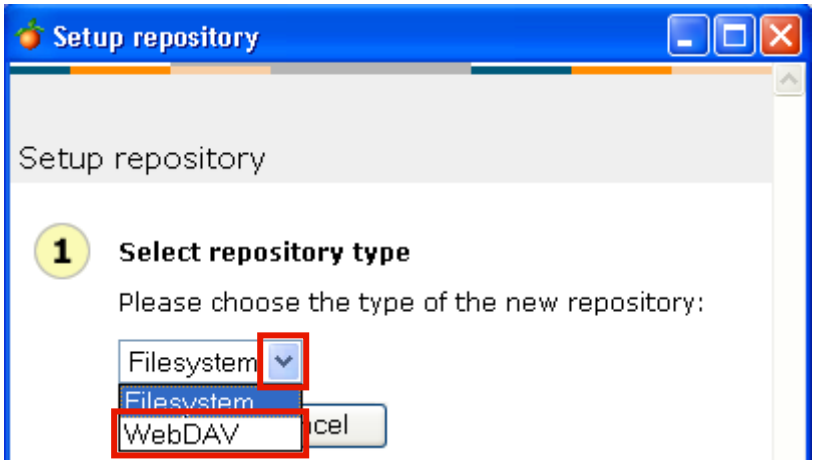
7.2 How to set up a new document repository (WebDAV)

To set up new document repositories, open the **Settings** task and then select the **Setup repositories** tree entry.



To set up a new document repository, use the **Add new document repository** button.

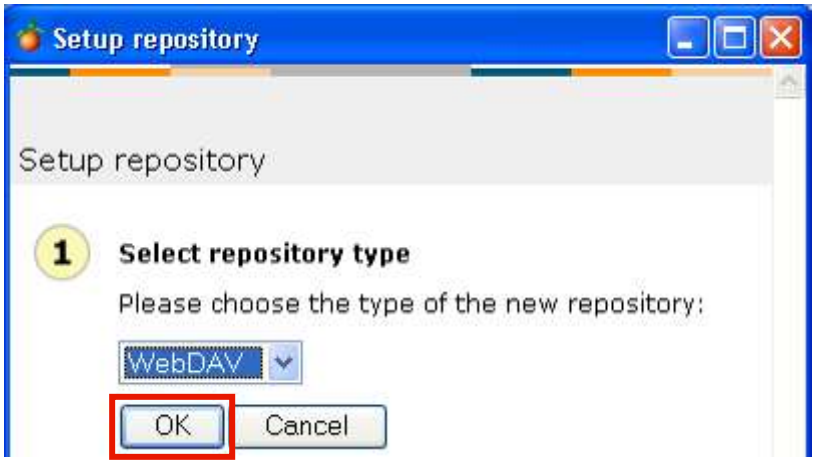
» Add a new document repository.



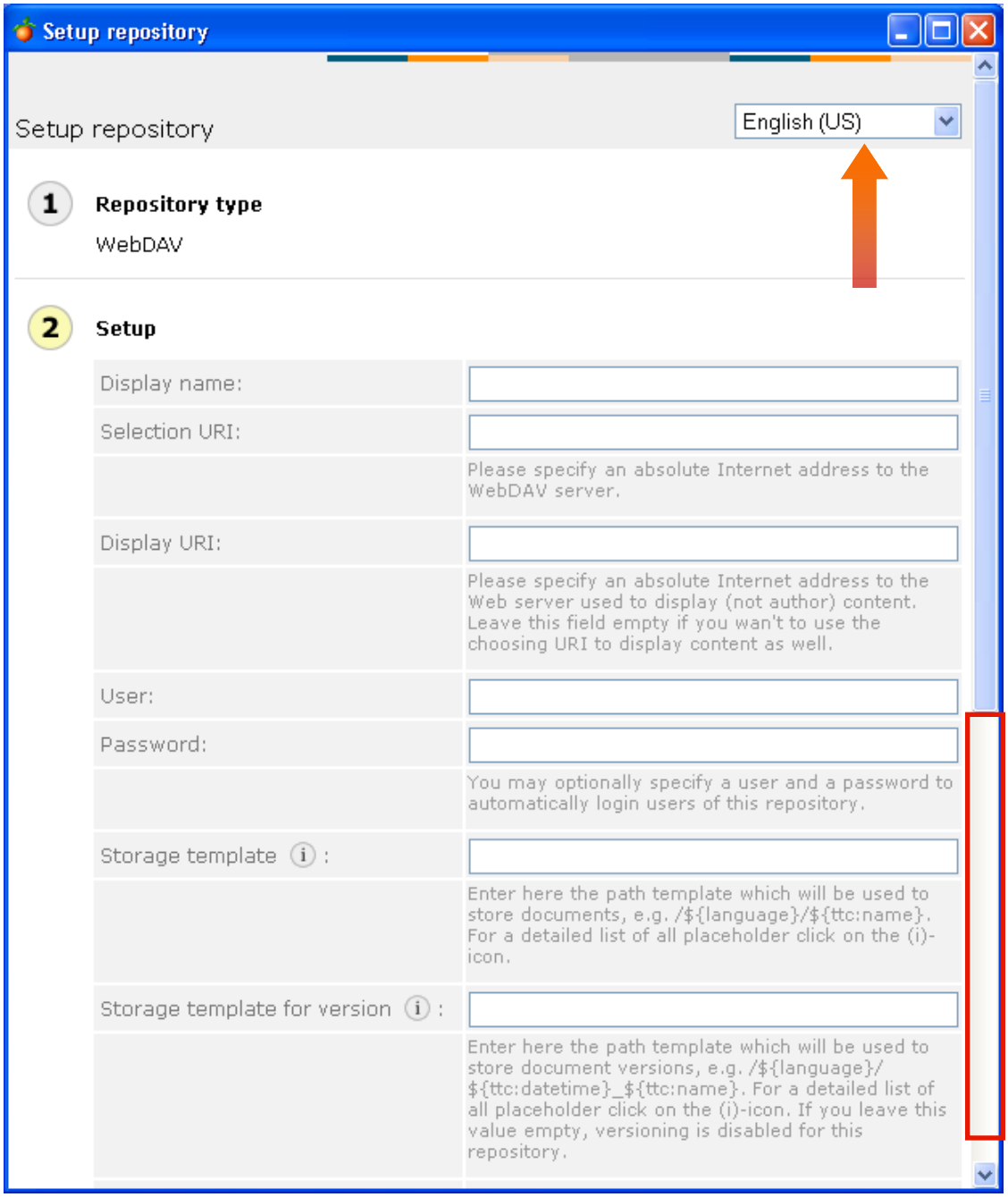
When adding a document repository, the first Wizard step involves selecting the repository type. You can choose between File system and WebDAV.

» Open the selection list.

» Select the **WebDAV** list entry.



» Click the **OK** button.


Setup repository
Setup repository
English (US)
1
Repository type
WebDAV
2
Setup
Display name:
Selection URI:
Please specify an absolute Internet address to the WebDAV server.
Display URI:
Please specify an absolute Internet address to the Web server used to display (not author) content. Leave this field empty if you wan't to use the choosing URI to display content as well.
User:
Password:
You may optionally specify a user and a password to automatically login users of this repository.
Storage template :
Enter here the path template which will be used to store documents, e.g. /${language}/${ttc:name}. For a detailed list of all placeholder click on the (i)-icon.
Storage template for version :
Enter here the path template which will be used to store document versions, e.g. /${language}/${ttc:datetime}_${ttc:name}. For a detailed list of all placeholder click on the (i)-icon. If you leave this value empty, versioning is disabled for this repository.

The second Wizard step is for specifying all settings regarding the document repository.

The second step when setting up a new document repository is more or less identical, whether using a file system or WebDAV. The input fields are discussed in greater detail in the "How to set up a new document repository (file system)" chapter.

Display name

All repository types have a **Display name** field in which a title should be entered for the particular document repository. This will be displayed when authors wish to switch from one document repository to the other, for example. The display name can be entered in various languages. Should the need arise, you can change over to a different language via the **language toggle** at the top right-hand corner of the dialog. The actual repository type determines which other input fields appear.

Selection URI

This field is used only in the case of a WebDAV repository type and is equivalent to the 'Root

directory' in a file repository system. Here you should specify the web address (URI) under which the WebDAV server can be accessed.

Display URI
This field is for specifying the address of the web server that is to be used for display purposes:

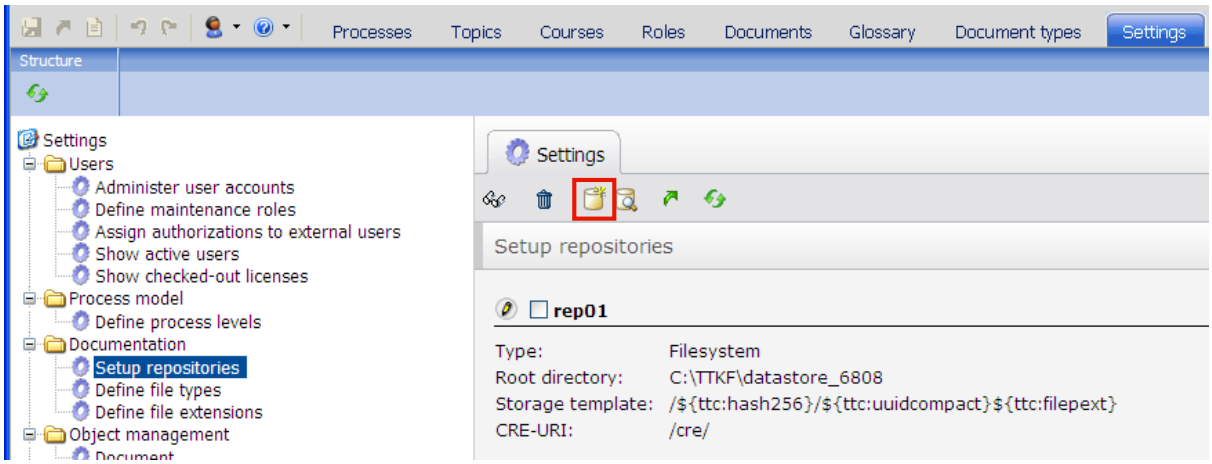
The fact that documents are not channeled directly via the Workbench or Portal is primarily due to performance considerations. With regard to the delivery of static files, it can generally be said that application servers do not perform as well as pure web servers. If you were to opt for direct delivery via an application server, this would have a particularly negative impact on the display speed of Team Trainer simulations.

User and Password
These fields are only used for the **WebDAV** repository type. If the WebDAV server is access-protected, the user name and password can be specified here.

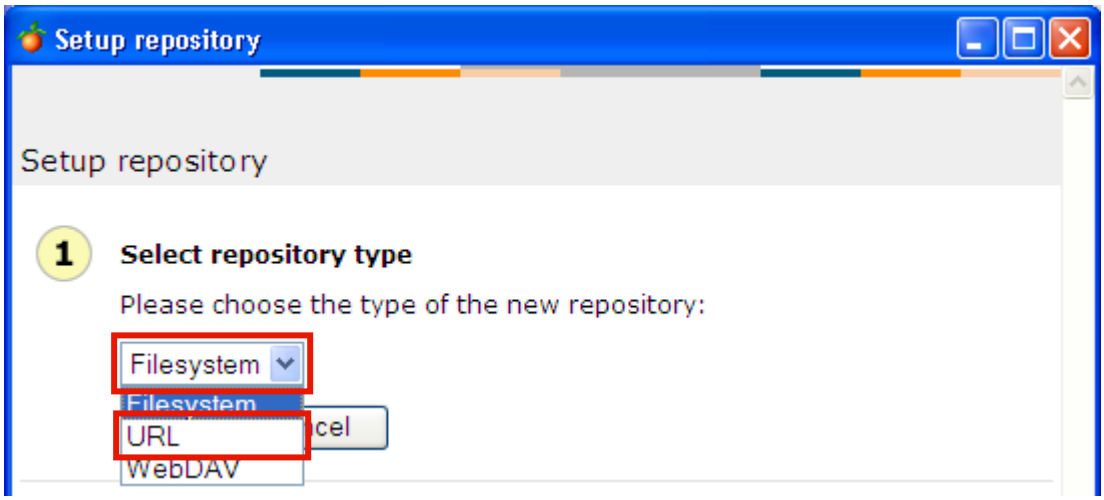
7.3 How to set up a new document repository (URL)

URL repositories are used to store hyperlinks to internal or external web pages. Thus, authors can create documents that actually simply mirror content already available, like files on the intranet or internet.

When setting up a URL repository, you can optionally define a Base URL. In the example, this will be the English wikipedia's website.

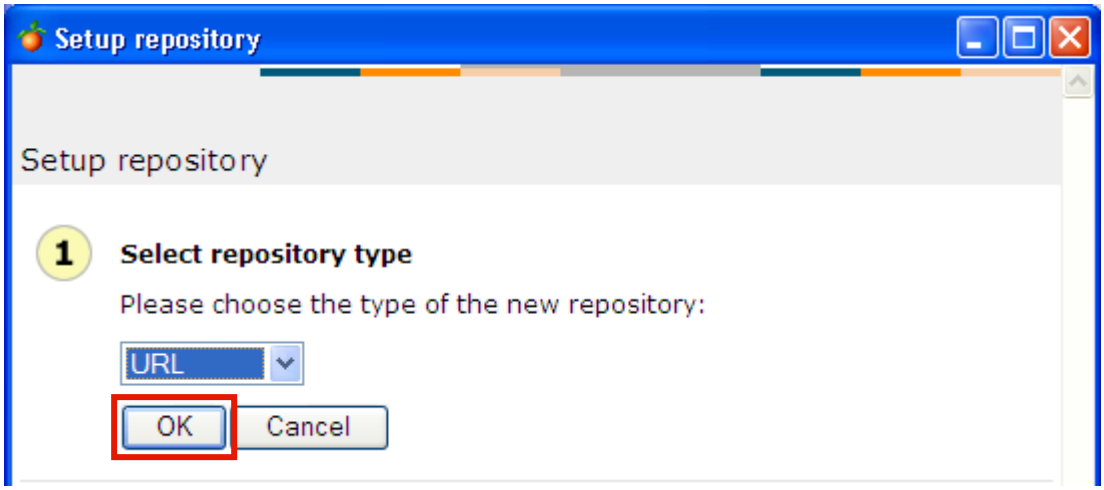


» Click the **Add new document repository...** button.

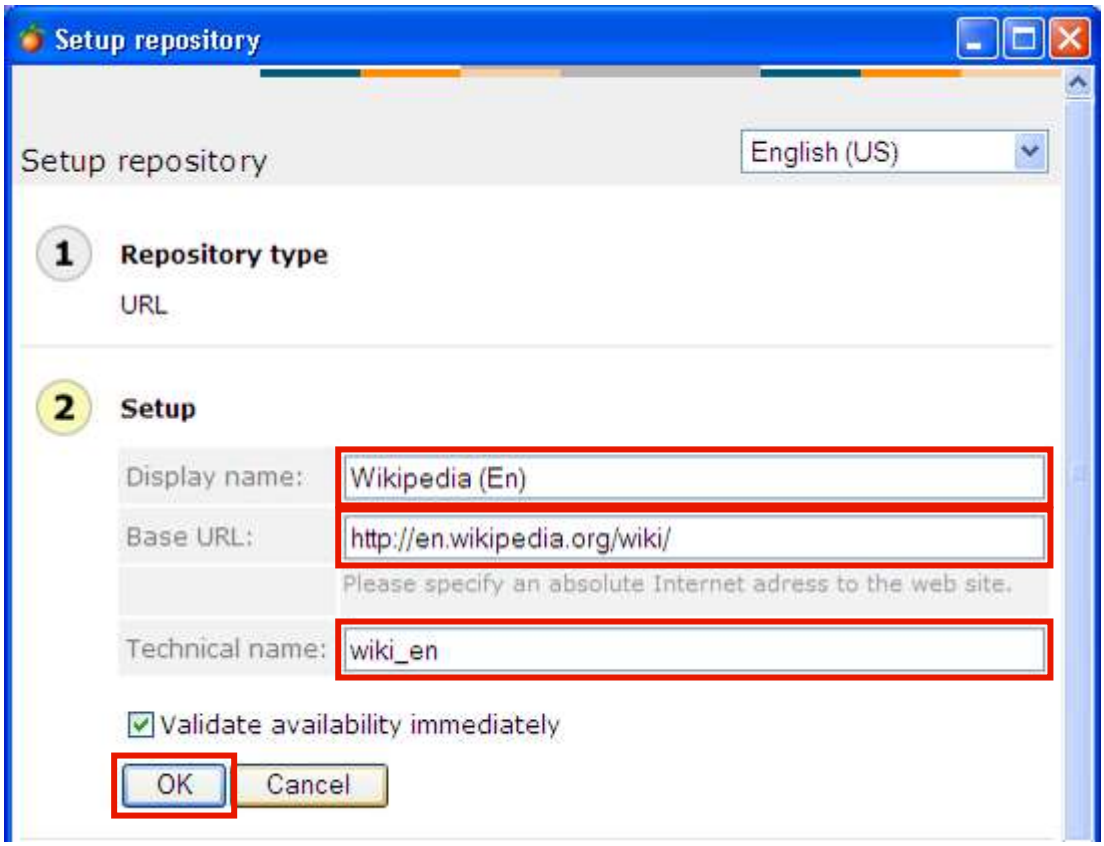


» Click the **Please choose the type of the new repository** combobox.

» Click the **URL** list item.



» Click the **OK** button.



Assign a name to the new repository.

You can enter several Display names here - one for each screen language. To enter a Display name for another language, just open the dropdown currently set to "English (US)" and switch to the desired language (like "German (Germany)").

» Enter **Wikipedia (En)** into the **Display name** field.

As mentioned earlier, you can specify a so-called **Base URL**. If you provide a Base URL, this will have the following effects:

1. Authors will only need to fill in the missing parts of the document URL to create a link.
2. Authors will not be able to provide links to documents or files that are not stored on the server specified here.

» Enter **http://en.wikipedia.org/wiki/** into the **Base URL** field.

» Enter **wiki_en** into the **Technical name** field.

» Click the **OK** button.

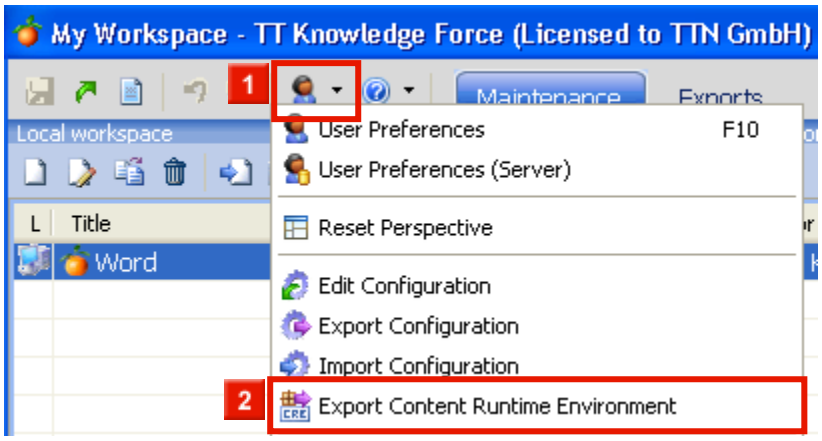
By default, the "Validate availability immediately" option is checked. You are advised to leave this option enabled, unless you encounter problems with this setting (this may be the case if the connection to the given Base URL is currently unavailable).

The new repository has been created.

Please note that you have to create at least one **document type** that uses the new repository - otherwise, authors won't be able to create URL documents.

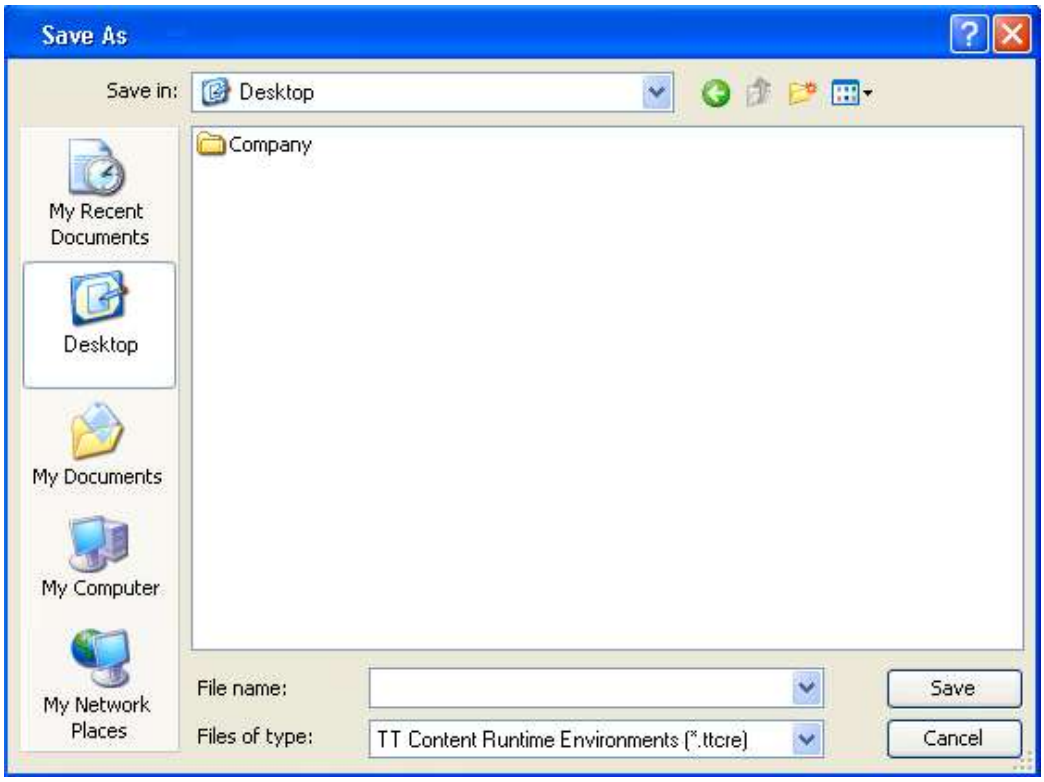
7.4 How to export the content runtime environment

The content runtime environment is used to update the main Player in the TT Knowledge Force server or the TT Offline Player (TTOP). This may come in handy if e.g. the centralized server features an older version of the CRE than the client computer.



» 1 Click the **Preferences** dropdown button.

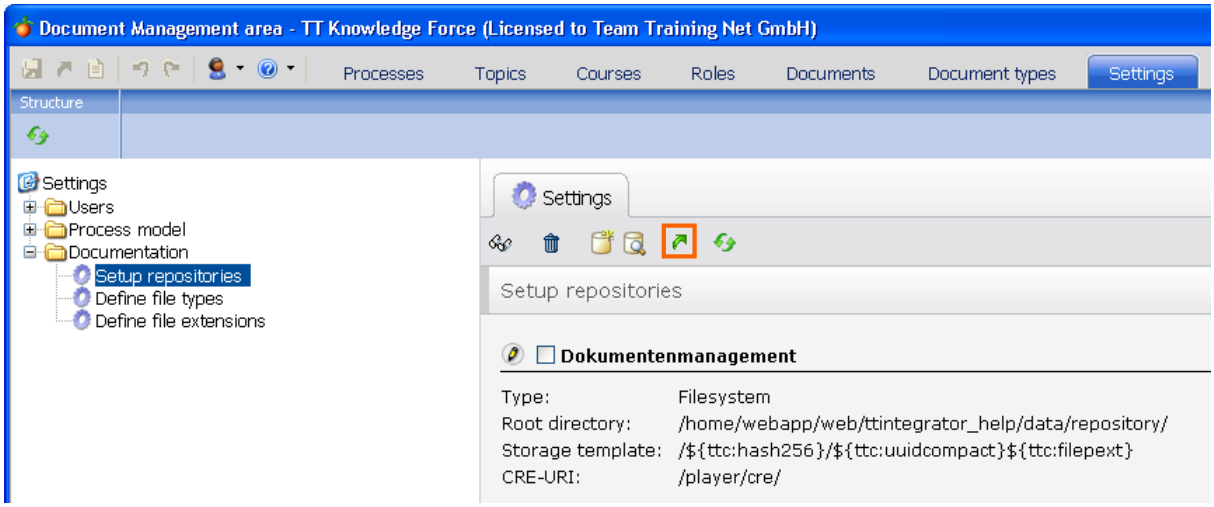
» 2 Click the **Export Content Runtime Environment** menu item.



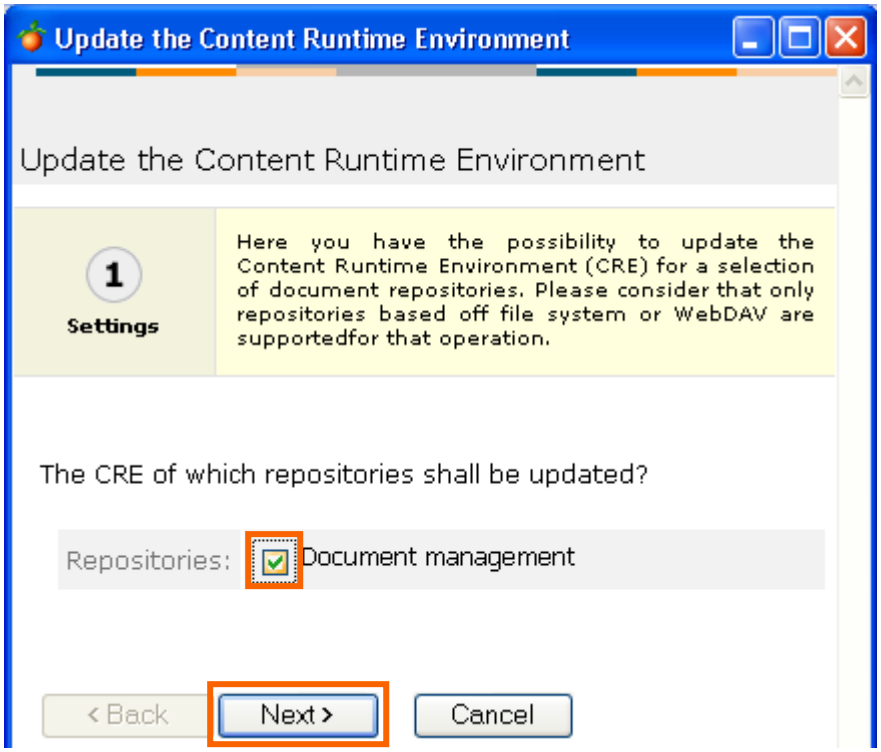
You then need to indicate a name and the storage location for the content runtime environment and click **Save**.

Note: In order to import a CRE file into the server, you need to be logged in with Administrator rights.

7.5 How to update a document repository's Content Runtime Environment



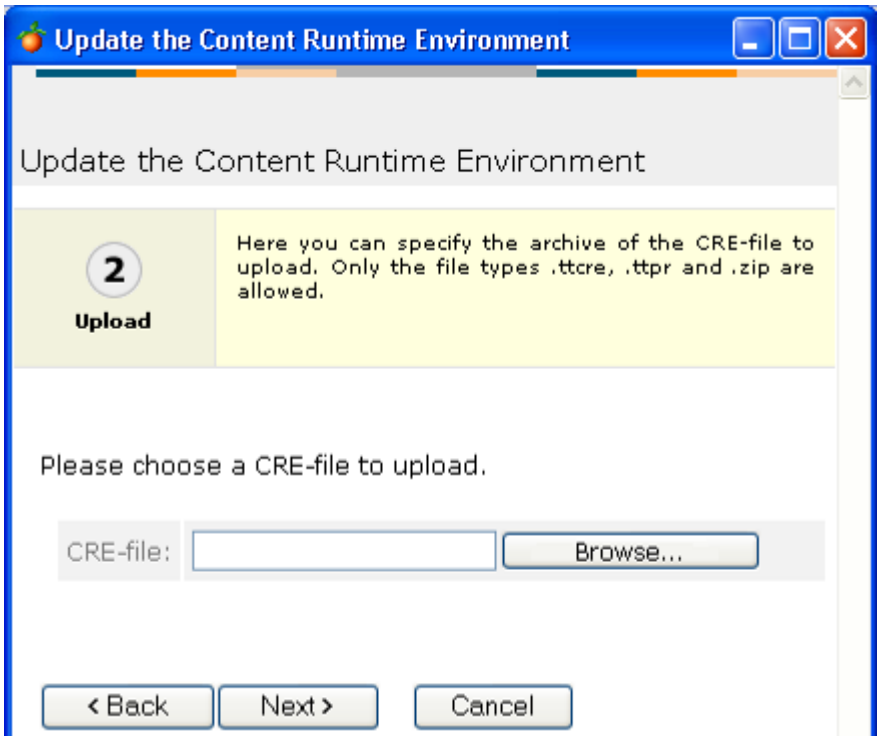
» Click the button **Update Content Runtime Environment...**.


Update the Content Runtime Environment
Update the Content Runtime Environment
1
Settings
Here you have the possibility to update the Content Runtime Environment (CRE) for a selection of document repositories. Please consider that only repositories based off file system or WebDAV are supportedfor that operation.
The CRE of which repositories shall be updated?
Repositories:
Document management
< Back
Next >
Cancel

The first step of the Wizard for updating the Content Runtime Environment allows you to select which repository is to be updated. There is only one repository in this example.

» Select the **Document management** repository.

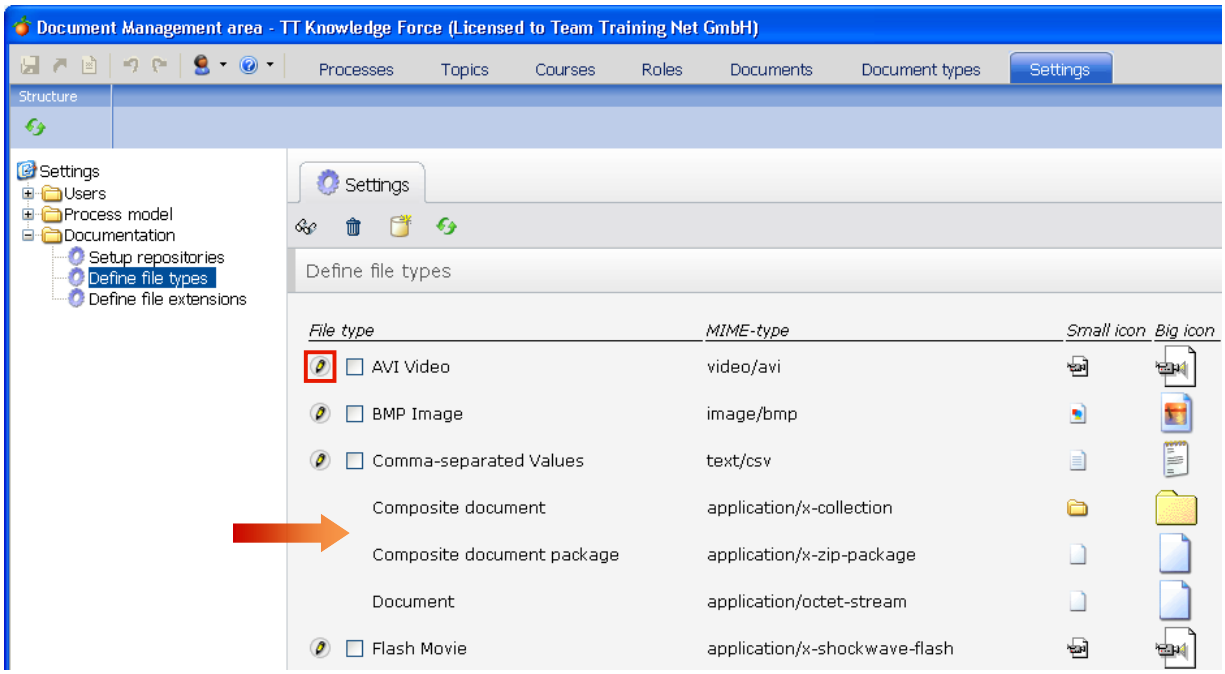
» Click the **Next >** button.


Update the Content Runtime Environment
Update the Content Runtime Environment
2
Upload
Here you can specify the archive of the CRE-file to upload. Only the file types .ttcre, .ttpr and .zip are allowed.
Please choose a CRE-file to upload.
CRE-file:
Browse...
< Back
Next >
Cancel

The second Wizard step is for specifying the appropriate file from your file system and updating the Content Runtime Environment by clicking the **Next** button.

7.6 How to define file types

It's also possible to edit the file types stored in the system.

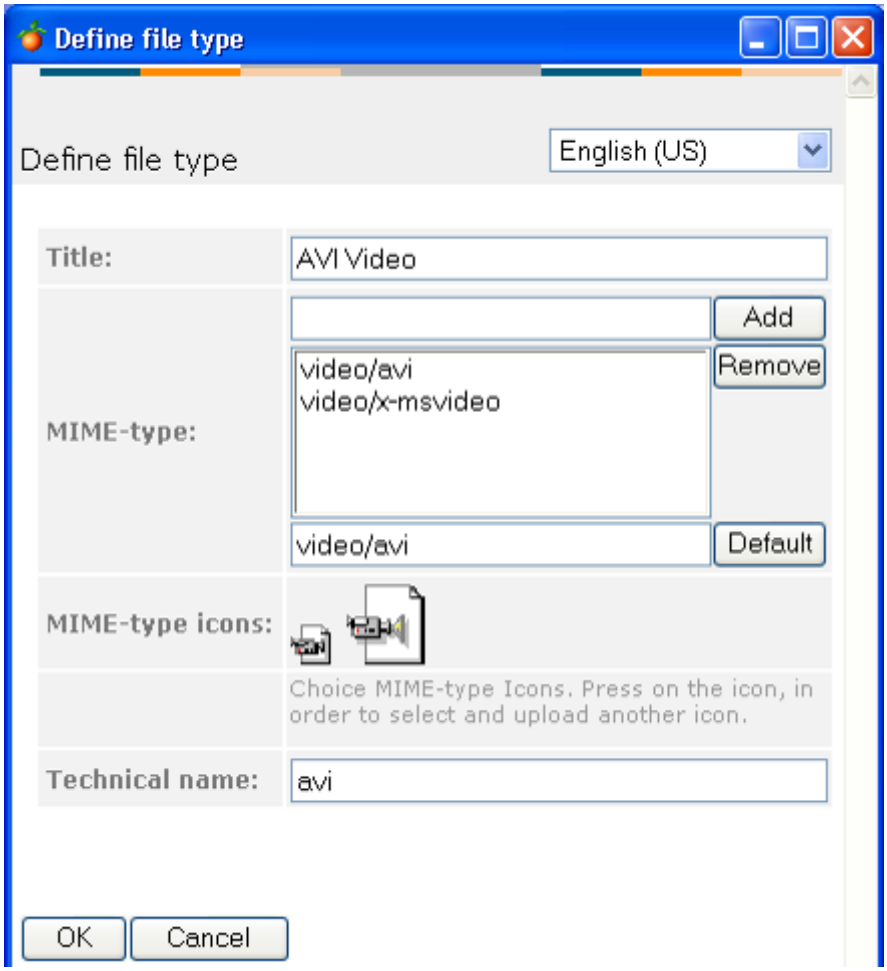


All the file types stored in the system are listed here. To edit a particular file type, click the associated Edit button.

» Click the **Edit** button in front of the "AVI Video" file type.

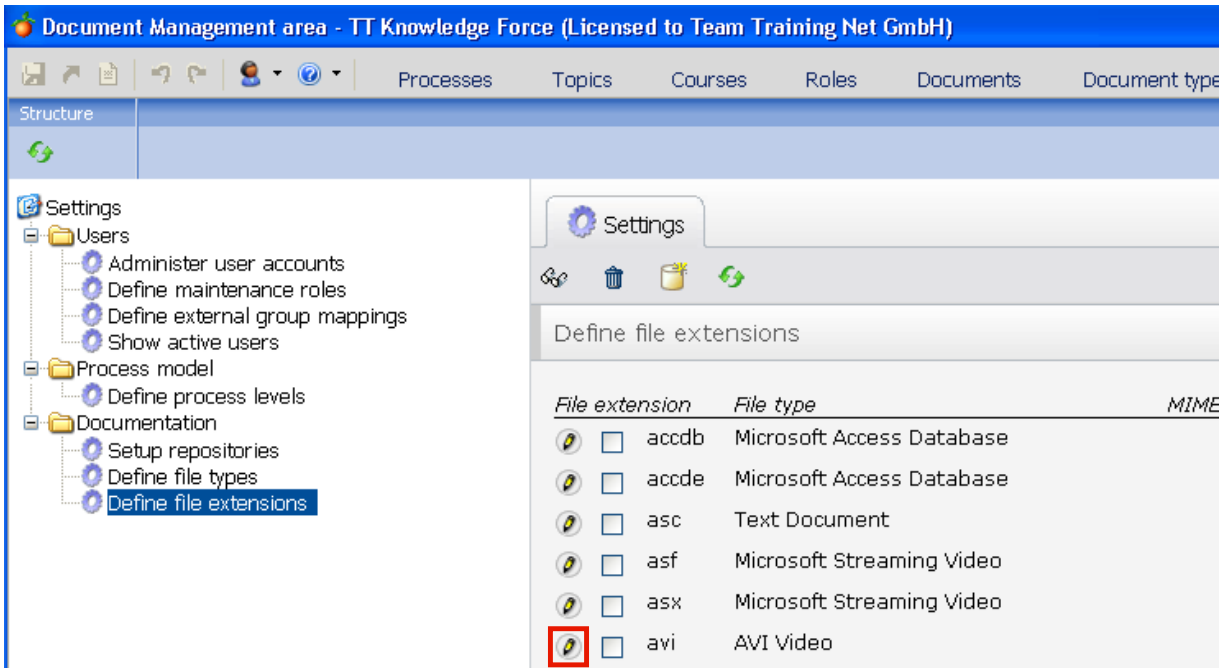
Some of the file types in the list are not released for editing purposes. Such file types can be neither selected, nor edited.

All corresponding file extensions are also deleted whenever a file type is deleted.

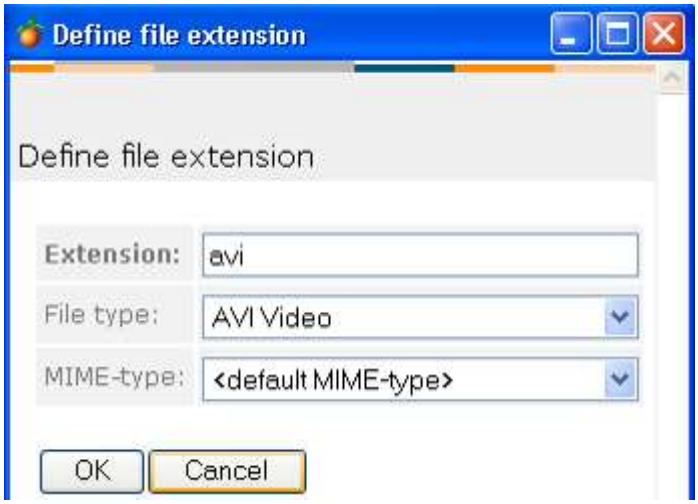


In addition to the title of the file type, you can also define several MIME types here. You can also select one of the MIME types as the default type. If you don't do this, the MIME type that was first added to the list will be automatically chosen as the default one.
Clicking one of the icons opens a dialog in which you can select an image which is used to depict the particular file type.

7.7 How to define file extensions



» Click the **Edit** button in front of the **avi** file extension.

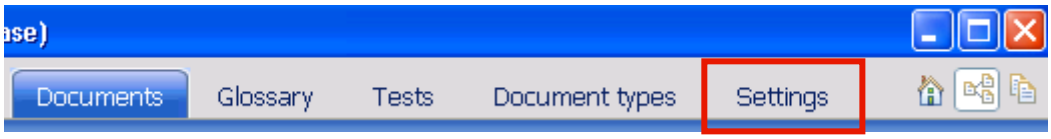


Here you can change the name of the file extension. You also have the option of using a selection list to assign a different file type to the file extension. The MIME types available for selection depend on the particular file type. The MIME types stored for every file type can be changed via the definition of file types (please refer to the **How to define file types** section).

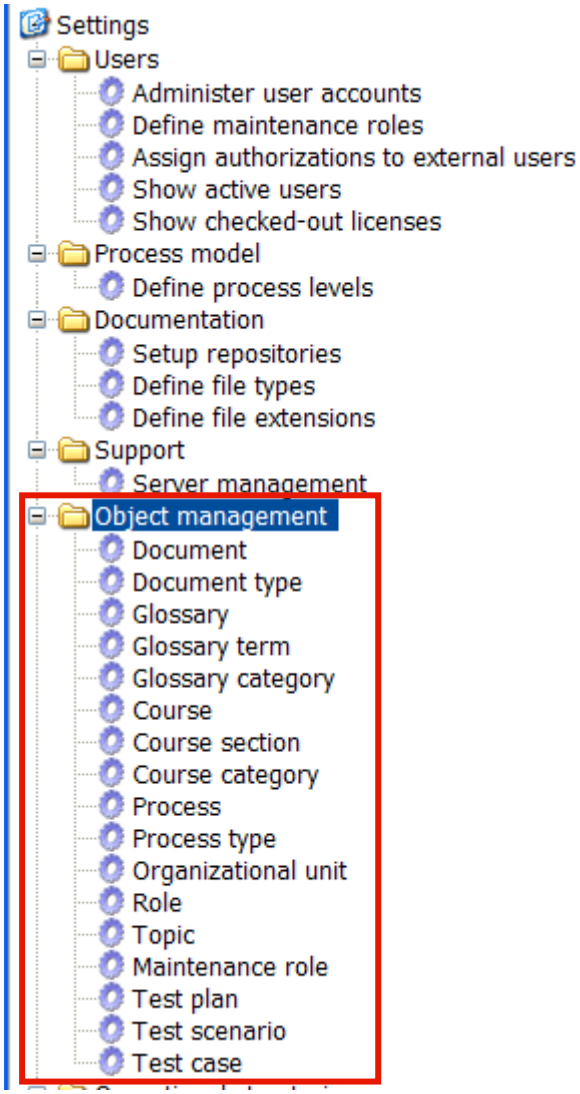
8 Administering object properties: Metadata maintenance

8.1 How to switch over to the Metadata maintenance view

Starting with TT Knowledge Force 6.5, Administrators can create and edit metadata of objects. The object properties can be changed via the Settings task:



» Click the **Settings** task.



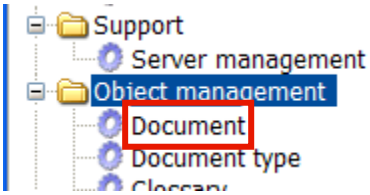
The following **Objects** are available (depending on the license):

- Document
- Document type
- Glossary
- Glossary term

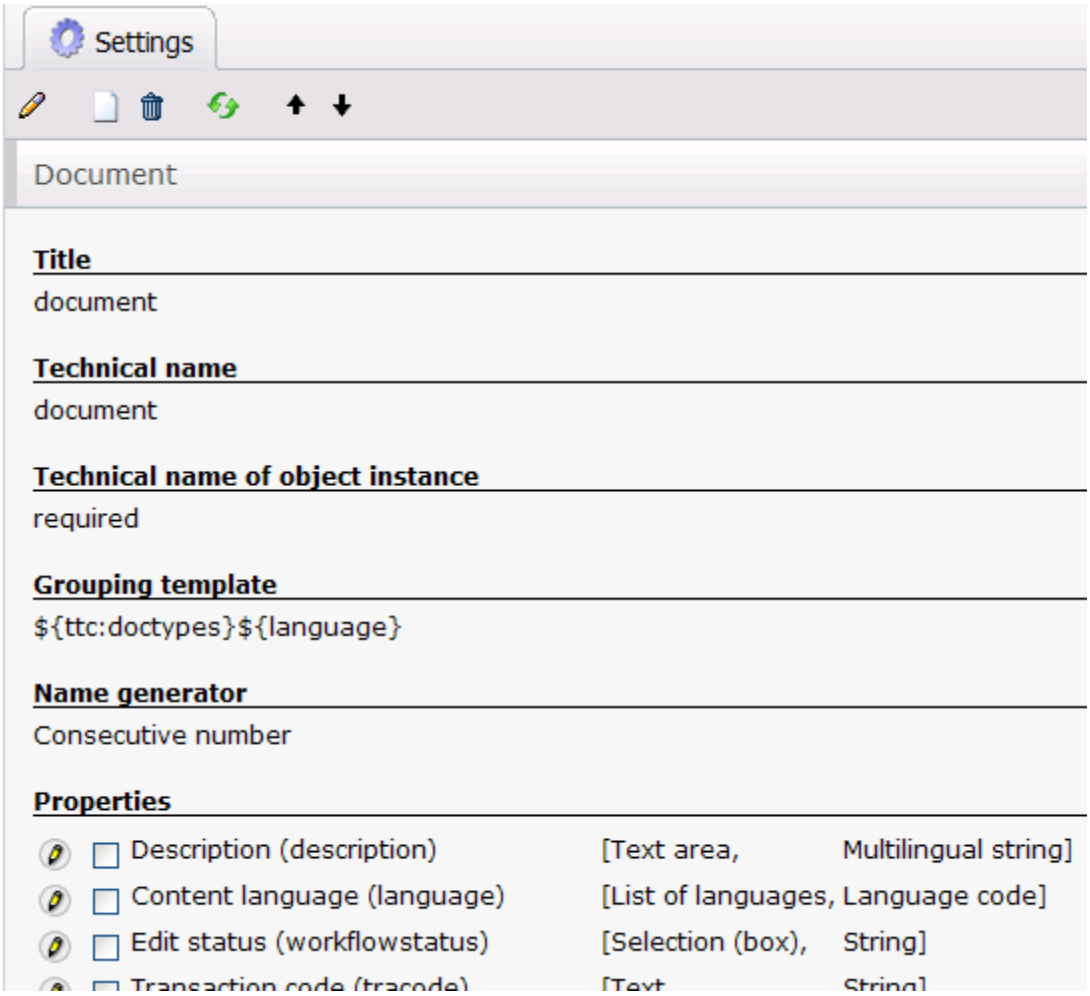
- Course
- Course section
- Course category
- Process
- Process type
- Organizational unit
- Role
- Topic
- Maintenance role
- Test plan
- Test scenario
- Test case

In the Settings tree, select a category from the **Object management** branch.

In the example, the **Document** Object is explored:

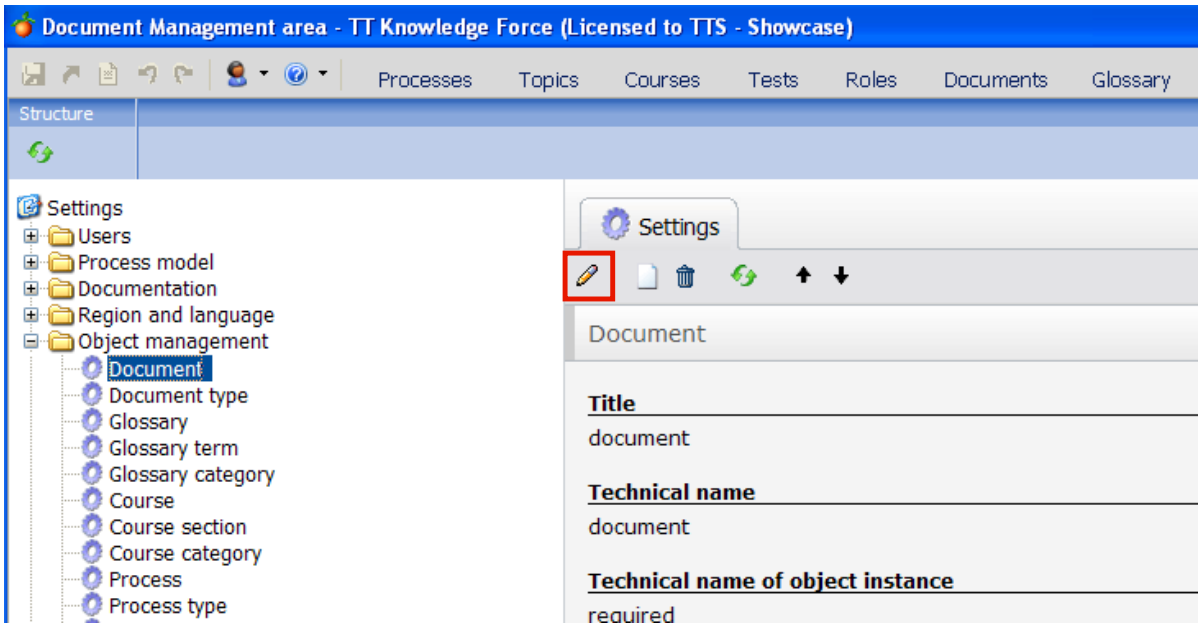


» Click the **Document** tree entry.

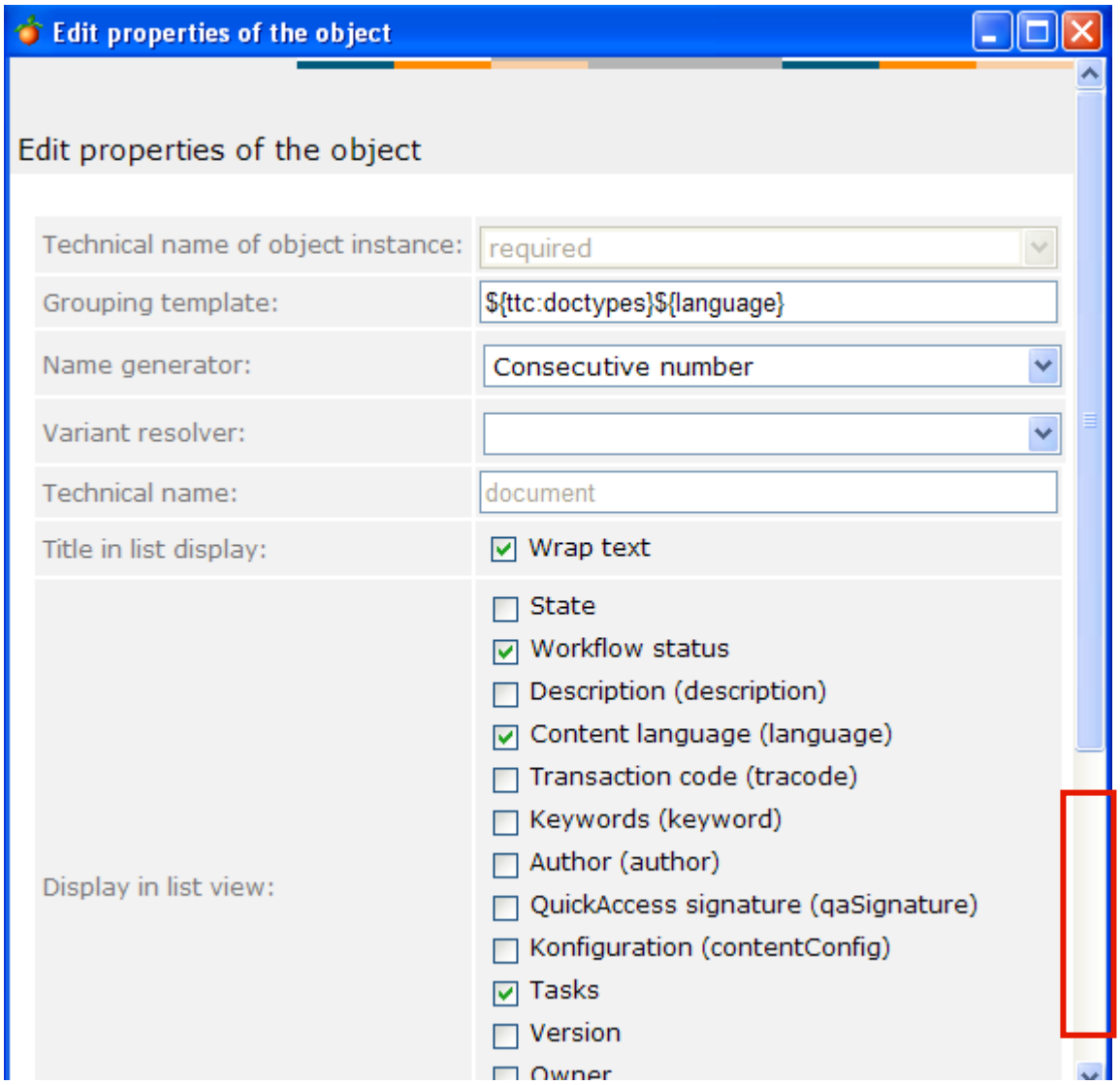


As you can see, you can easily edit, create or delete the properties of the selected object. The following chapters will explain the necessary steps.

8.2 How to edit the global properties of an object



» Click the **Edit entity...** button.



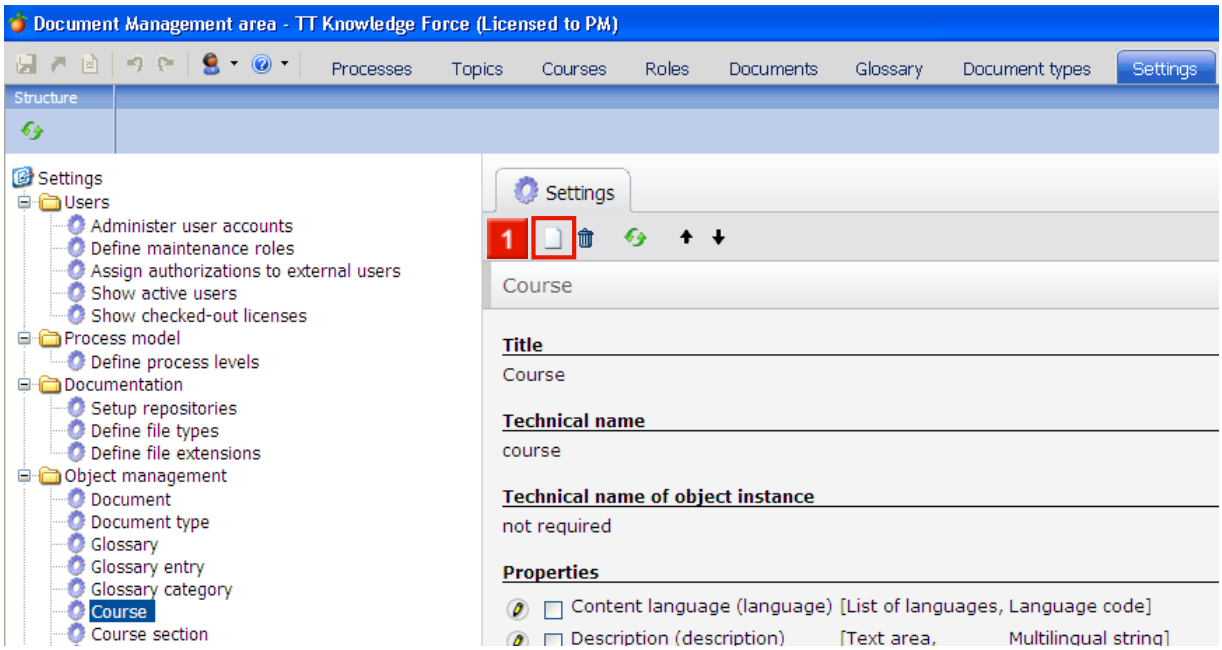
In the pop-up window, you can alter the global properties of the selected object. Note that you cannot change its technical name.

For Documents, you can define which pieces of information are shown in lists (e.g. in the course view). If you place a tick mark in the box in front of a property, the property will be displayed. For the **Title** of a document, you may also want to activate the "Wrap text" option, which will cause long titles to break and use a second line.

If you enable the 'Tasks' option, authors will quickly see in the list view (e.g. in their workspace) whether a document contains open tasks that need their attention.

» When you have finished: Click the **OK** button (at the bottom of the window).

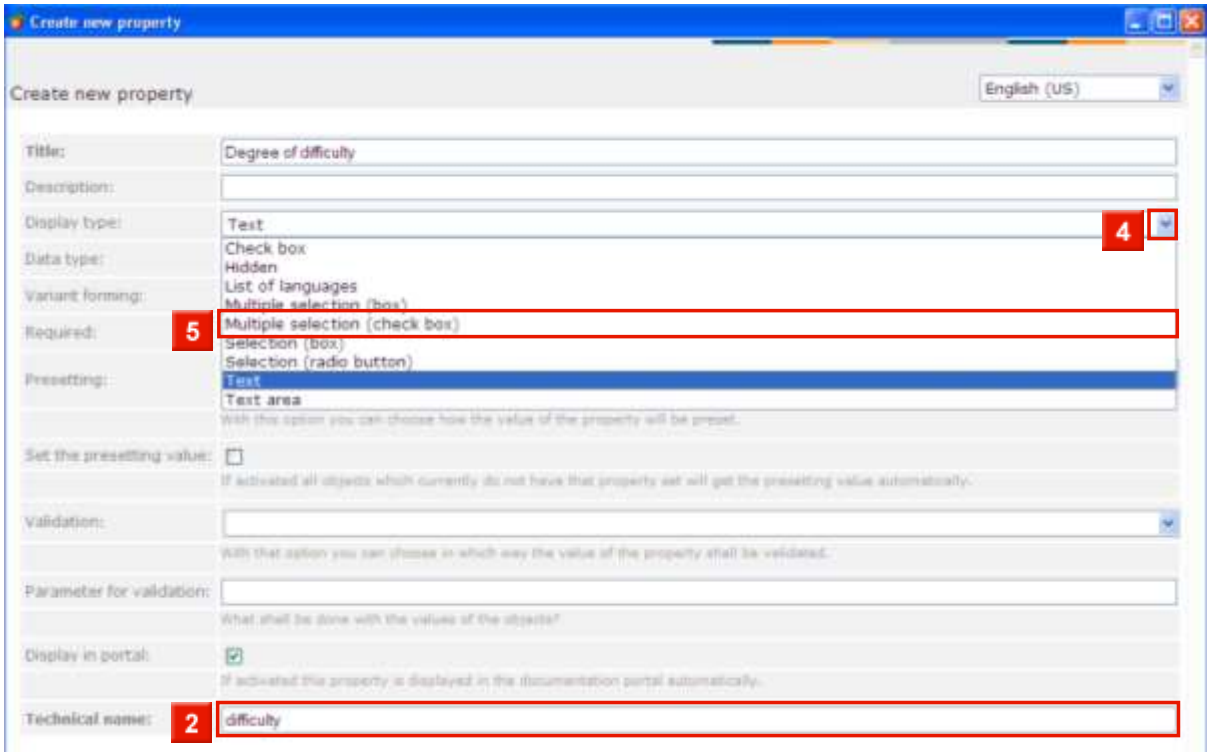
8.3 How to create a new object property



When you select a tree item below the **Object management** section in the settings tab, its currently defined properties are listed to the right.

In the example, let's assume you want to introduce a property to define a course's difficulty. To accomplish this, start by adding a new property:

» 1 Click the **Add new property...** button.



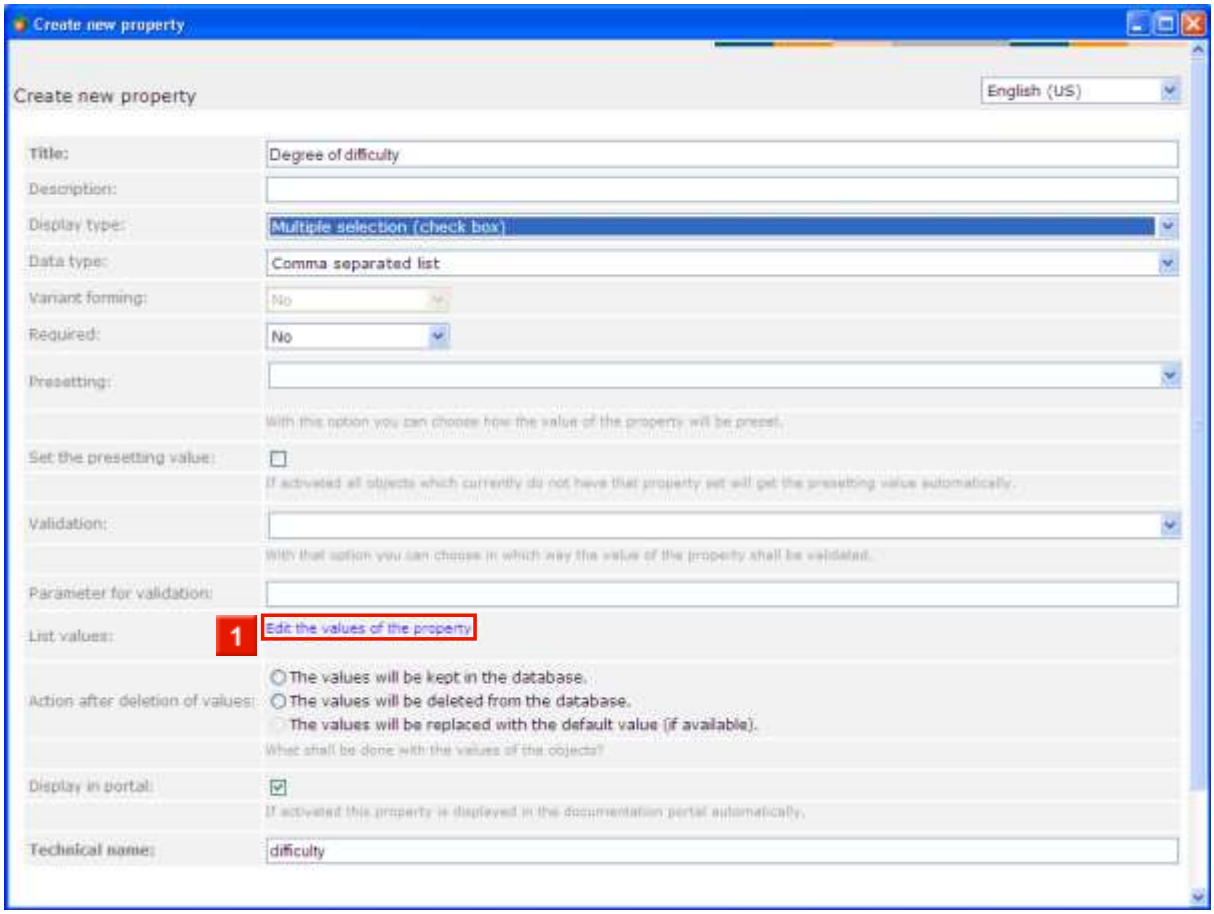
» 1 Enter **Degree of difficulty** into the **Title** field.

» 2 Click the **Technical name** input field.

» 3 Enter **difficulty** into **Technical name** field.

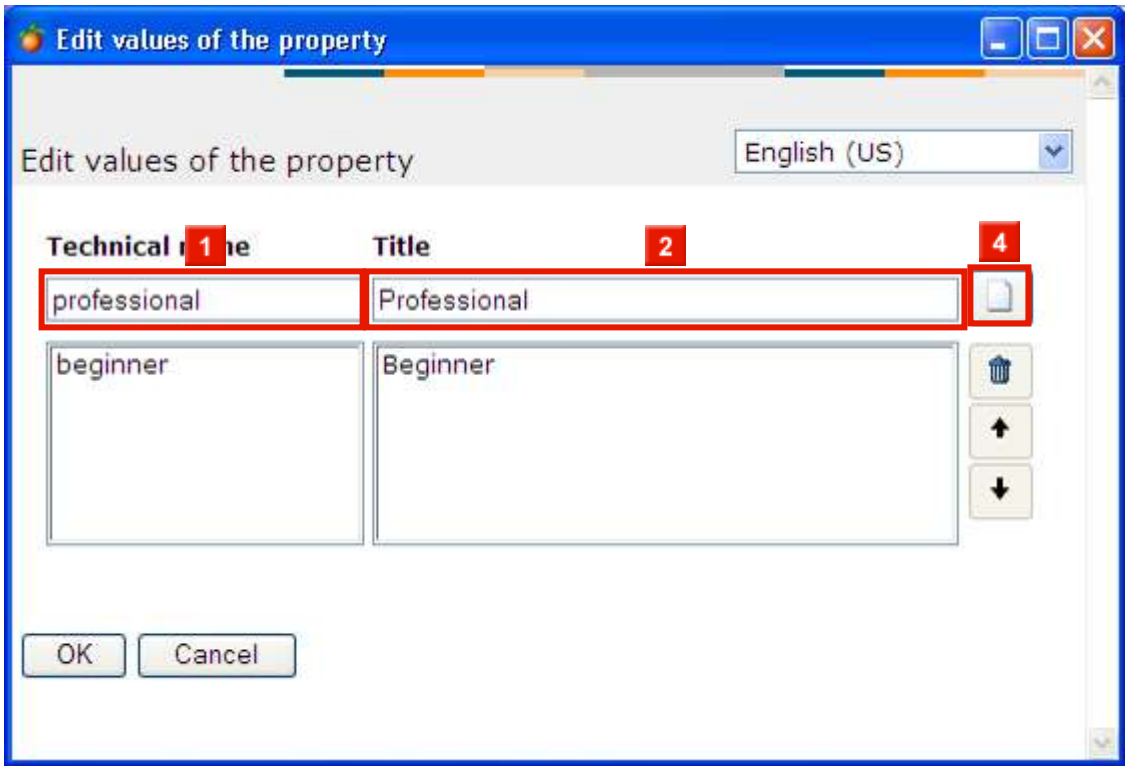
» 4 Click the **Open** dropdown button for **Display type**.

» 5 Click the **Multiple selection (check box)** list item.


Create new property
Create new property
English (US)
Title:
Degree of difficulty
Description:
Display type:
Multiple selection (check box)
Data type:
Comma separated list
Variant forming:
No
Required:
No
Presetting:
With this option you can choose how the value of the property will be preset.
Set the presetting value:
If activated all objects which currently do not have that property set will get the presetting value automatically.
Validation:
With that option you can choose in which way the value of the property shall be validated.
Parameter for validation:
List values:
1
Edit the values of the property
Action after deletion of values:
The values will be kept in the database.
The values will be deleted from the database.
The values will be replaced with the default value (if available).
What shall be done with the values of the objects?
Display in portal:
If activated this property is displayed in the documentation portal automatically.
Technical name:
difficulty

As you can see, the possible values of the property have changed in accordance with the change in type.

» 1 Click the **Edit the values of the property** hyperlink.



» 1 Enter **beginner** into the **Technical name** field.

» 2 Click the **Title** input field.

» 3 Enter **Beginner** into the **Title** field.

» 4 Click the **Add value** button.

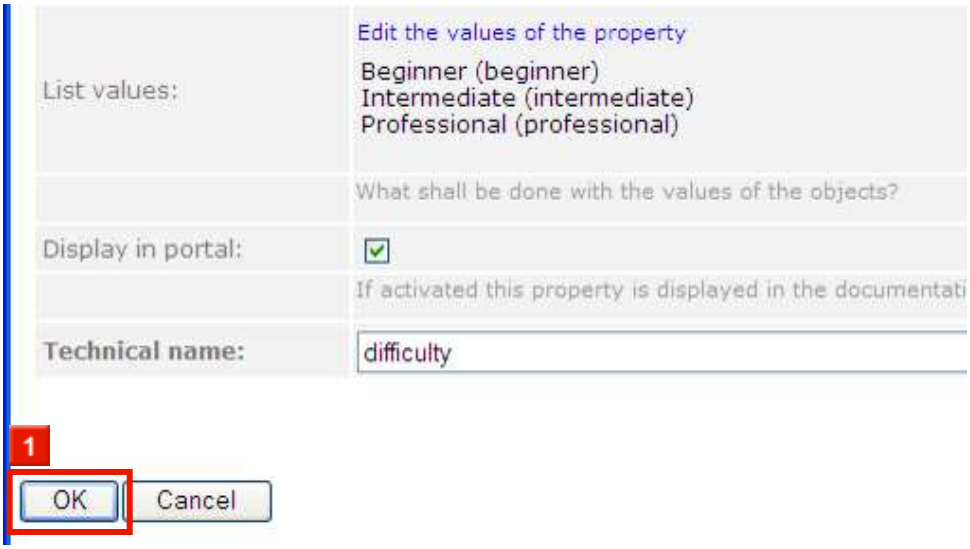
The new value and its Technical name have been added. Now repeat the steps to add a 'Professional and an 'Intermediate' value.
For your convenience, the cursor is already active in the **Technical name** field.

You can easily change the order of the values:

» 1 Click the **Intermediate** list item.

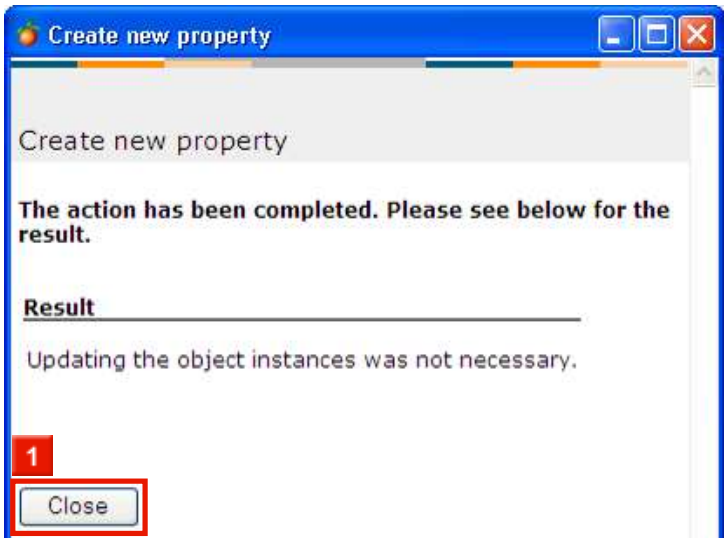
» 2 Click the **Move up** button.

» 1 Click the **OK** button.

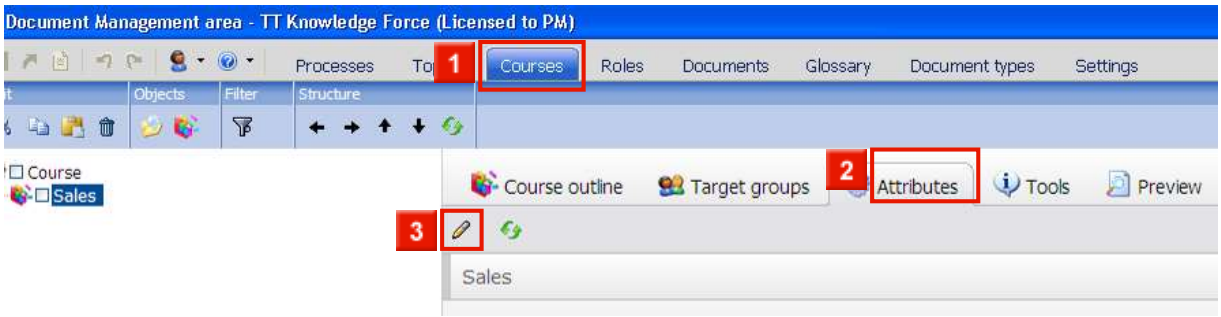


» 1 Click the **OK** button.

By default, the new property will automatically be displayed in the Web Publisher. To hide the property from portal users, uncheck the **Display in portal** option.



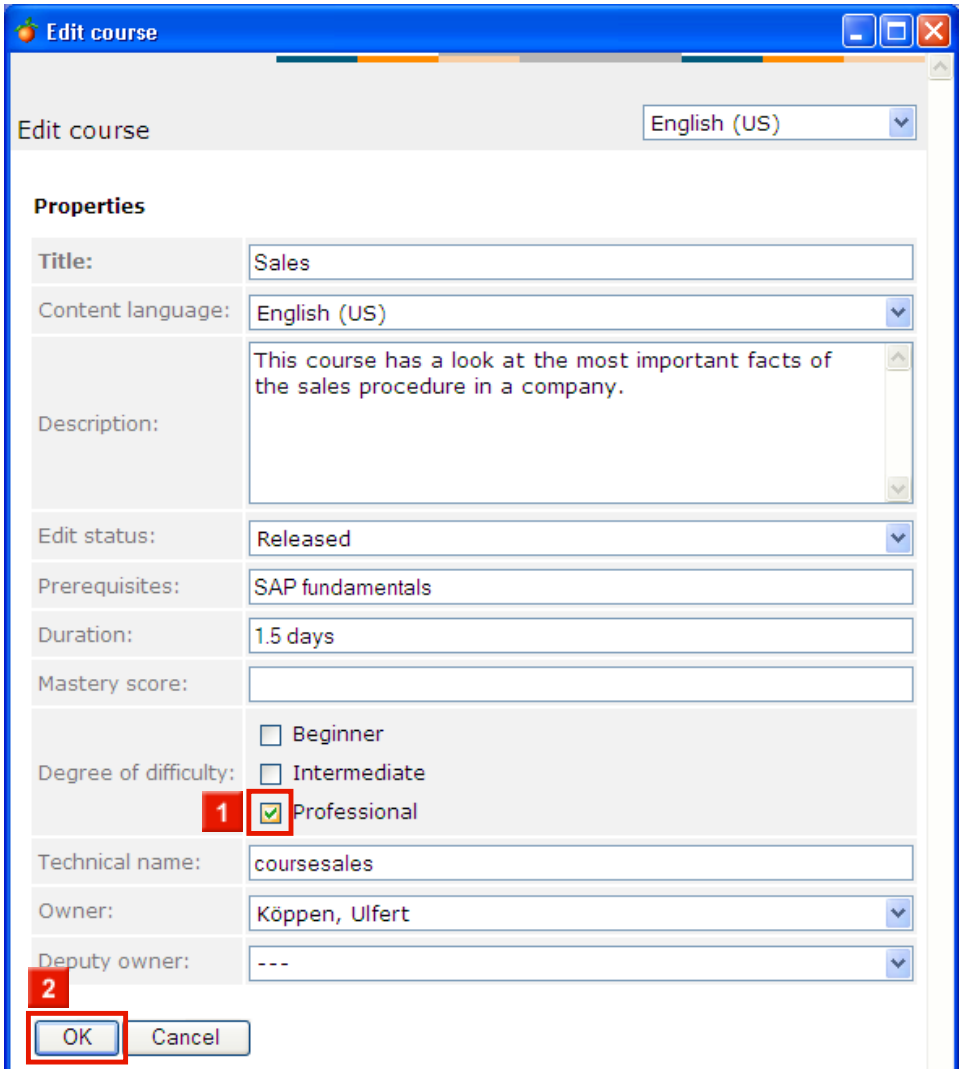
» 1 Click the **Close** button.



» 1 Click the **Courses** tab.

» 2 Click the **Attributes** tab.

» 3 Click the **Edit properties...** button.



As you can see, the freshly created property "Degree of difficulty" is available to describe the course.

» 1 Click the **Professional** checkbox.

» 2 Click the **OK** button to confirm the change.

The course has now been marked as "Degree of difficulty: Professional".

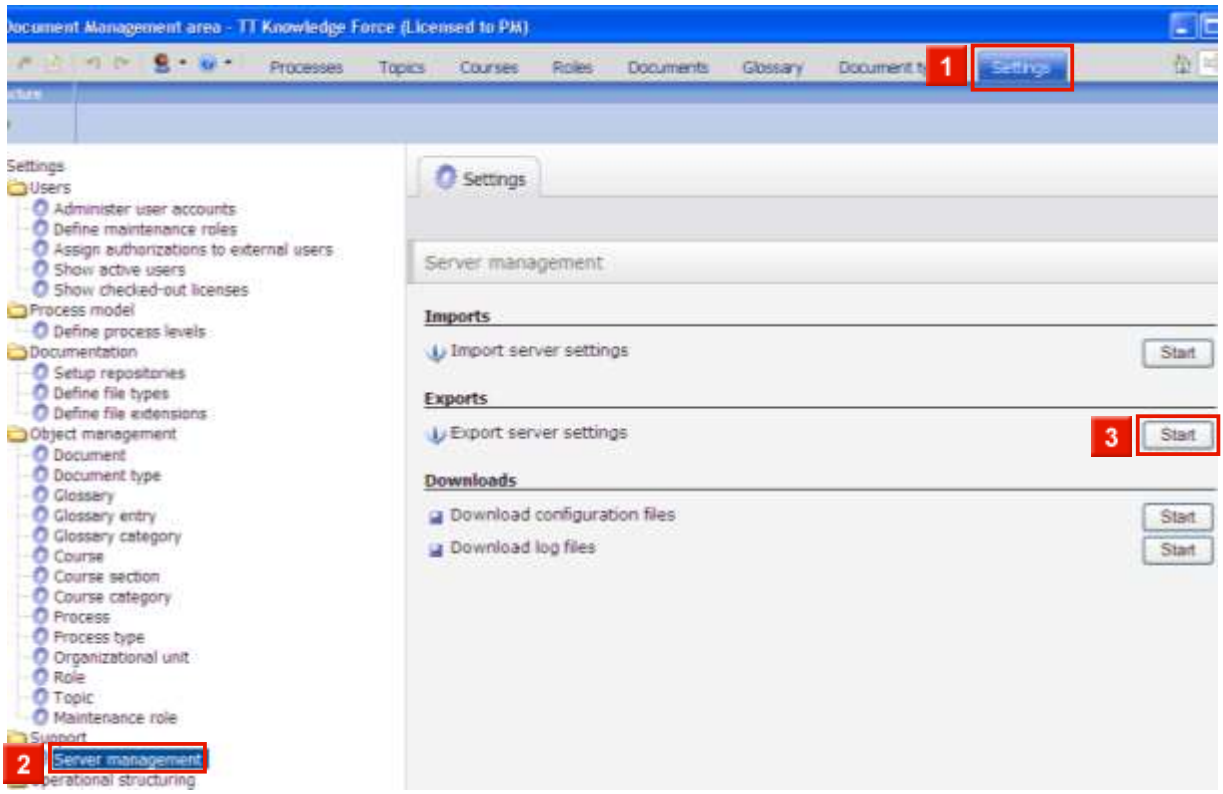
8.4 How to export / import server metadata

8.4.1 Export server settings

You can export server settings to a single file.
The setting package may include:

- Author roles
- Object definitions
- Properties definitions

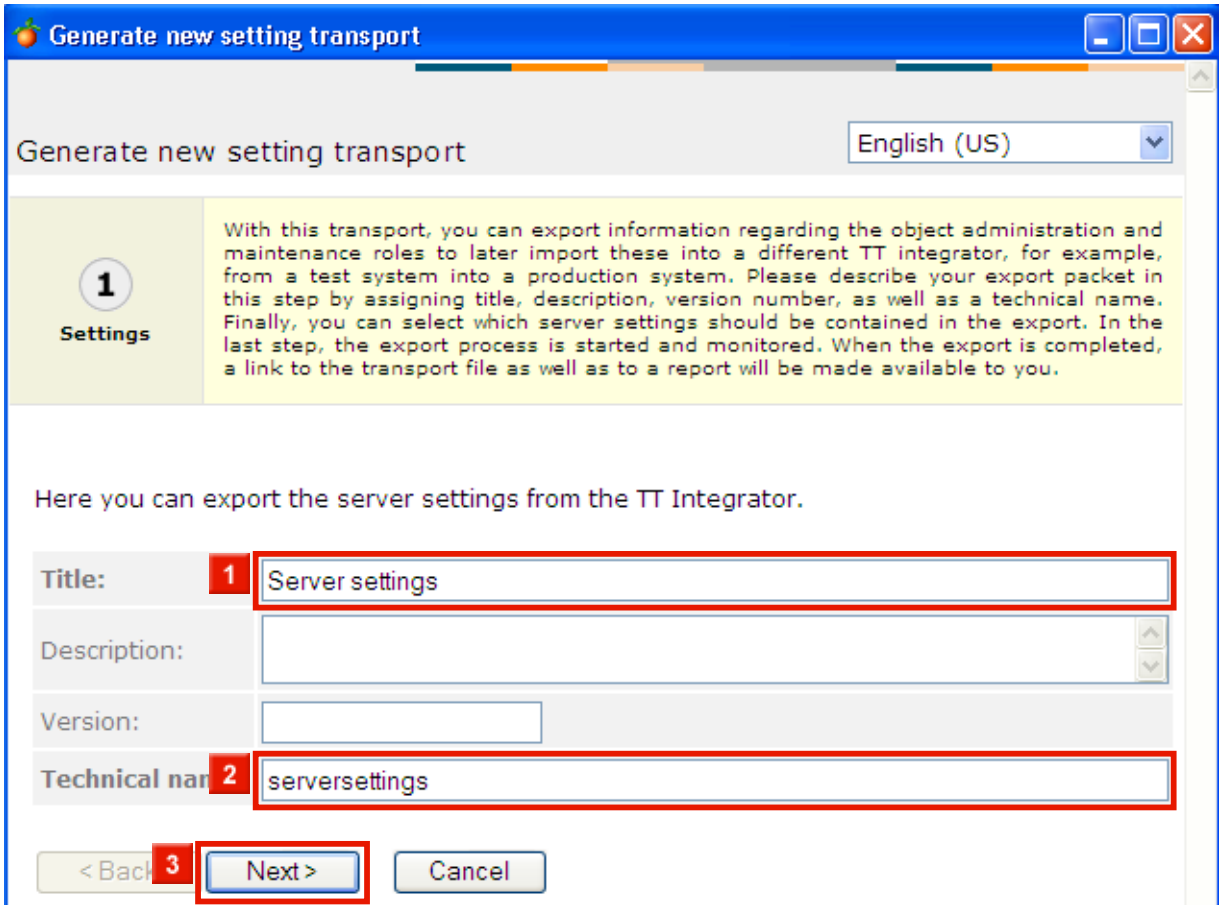
Please note that the rights granted to certain author roles with regard to document types are not included in the export.



» 1 Click the **Settings** tab.

» 2 Click the **Server management** tree entry.

» 3 Click the **Start** button next to 'Export server settings'.


Generate new setting transport
Generate new setting transport
English (US)
1
Settings
With this transport, you can export information regarding the object administration and maintenance roles to later import these into a different TT integrator, for example, from a test system into a production system. Please describe your export packet in this step by assigning title, description, version number, as well as a technical name. Finally, you can select which server settings should be contained in the export. In the last step, the export process is started and monitored. When the export is completed, a link to the transport file as well as to a report will be made available to you.
Here you can export the server settings from the TT Integrator.
Title:
1
Server settings
Description:
Version:
Technical nar
2
serversettings
< Back
3
Next >
Cancel

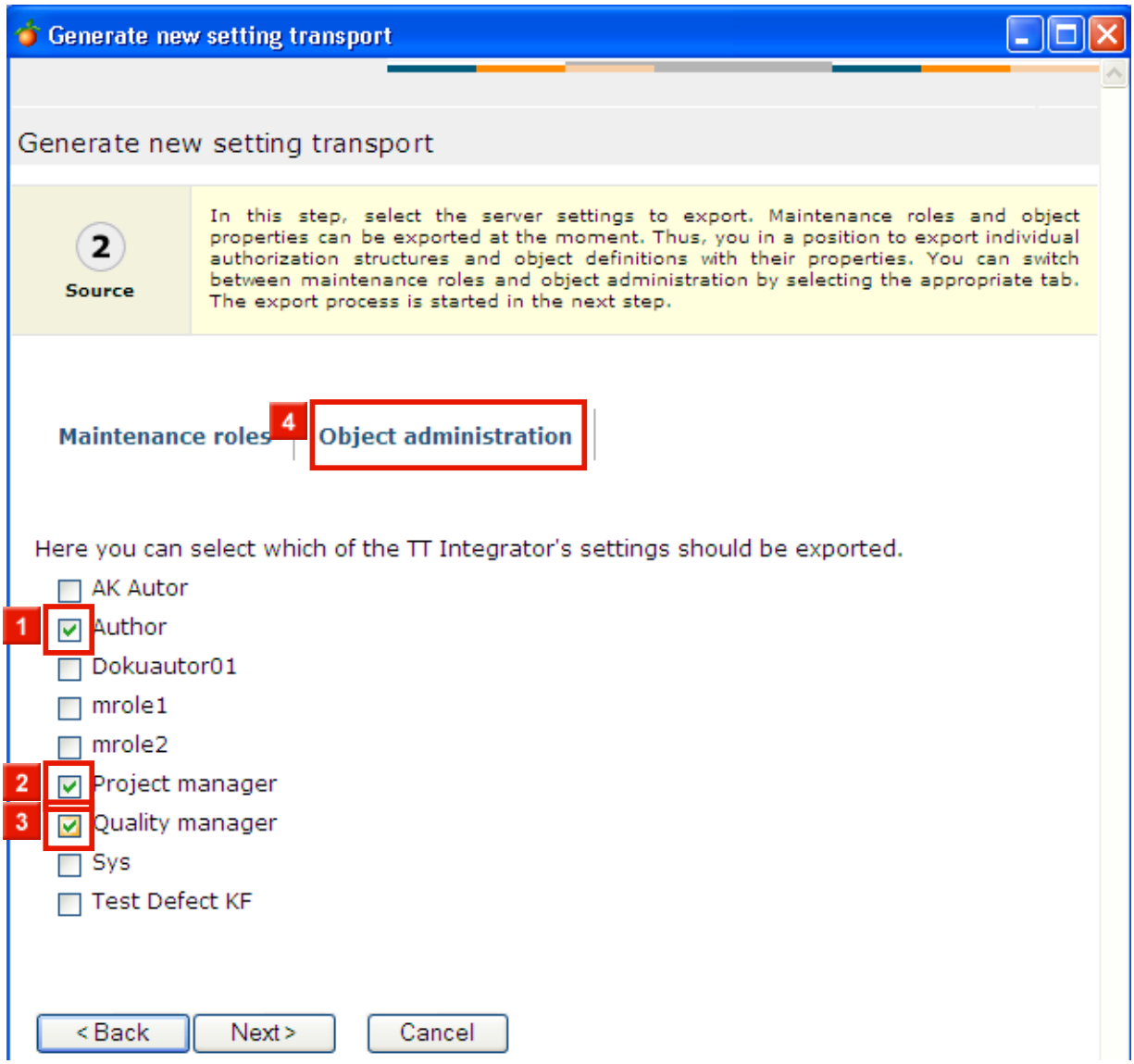
As usual, you have to provide at least the information for the fields that appear in bold print: a

Title and the **Technical name** of the transport. For reference purposes, you may also want to use the Description and Version fields.

» 1 Enter **Server settings** into the **Title** field.

» 2 Enter **serversettings** into the **Technical name** field.

» 3 Click the **Next >** button.


Generate new setting transport
Generate new setting transport
2
Source
In this step, select the server settings to export. Maintenance roles and object properties can be exported at the moment. Thus, you in a position to export individual authorization structures and object definitions with their properties. You can switch between maintenance roles and object administration by selecting the appropriate tab. The export process is started in the next step.
Maintenance roles
4
Object administration
Here you can select which of the TT Integrator's settings should be exported.
AK Autor
1
Author
Dokuautor01
mrole1
mrole2
2
Project manager
3
Quality manager
Sys
Test Defect KF
< Back
Next >
Cancel

In the second step, you can define which Author roles and objects to include in the transport. In the Example, select the **Author**, **Project manager**, and **Quality manager** author roles.

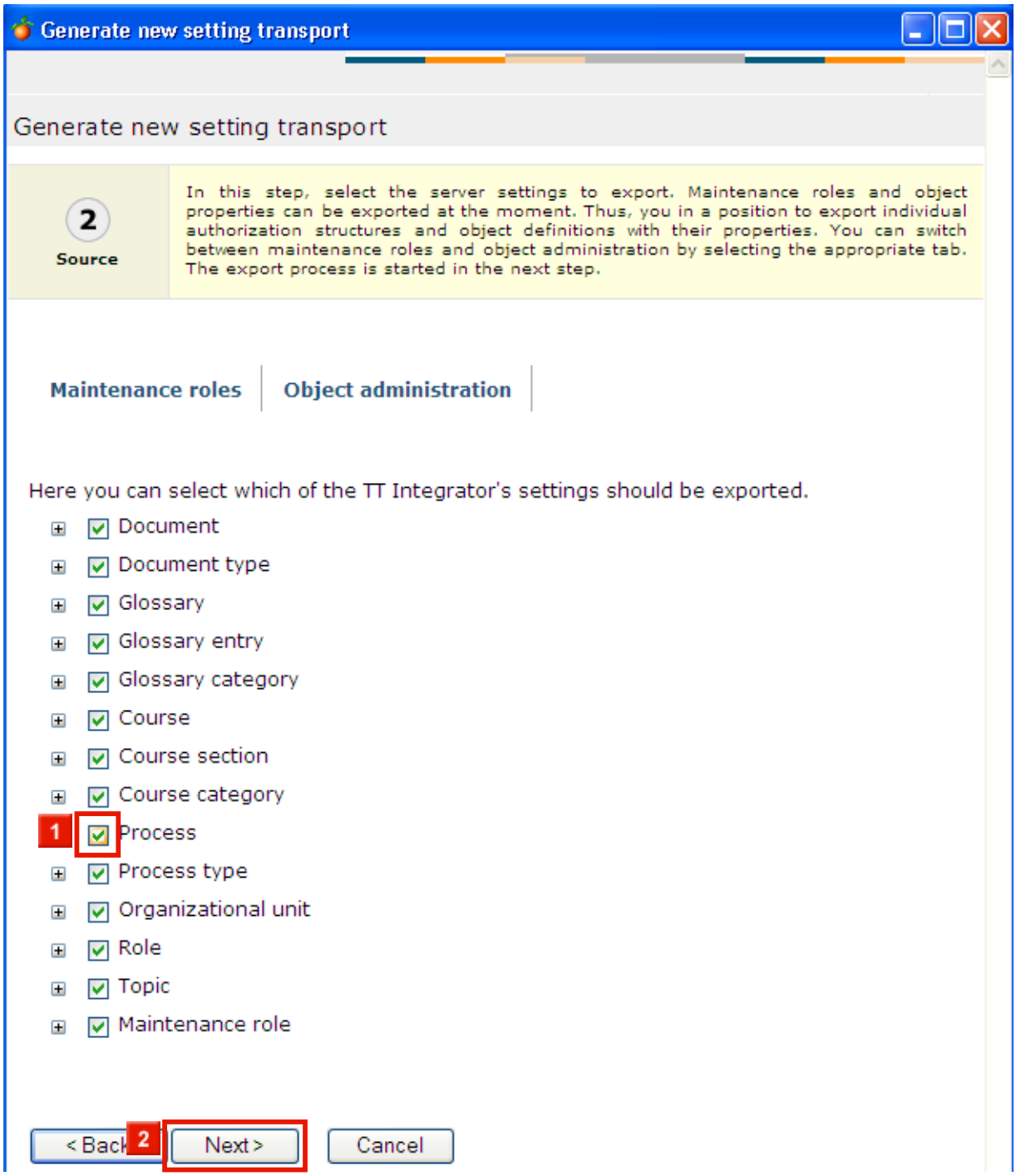
» 1 Click the **Author** checkbox.

» 2 Click the **Project manager** checkbox.

» 3 Click the **Quality manager** checkbox.

Now switch over to the **Object administration** tab.

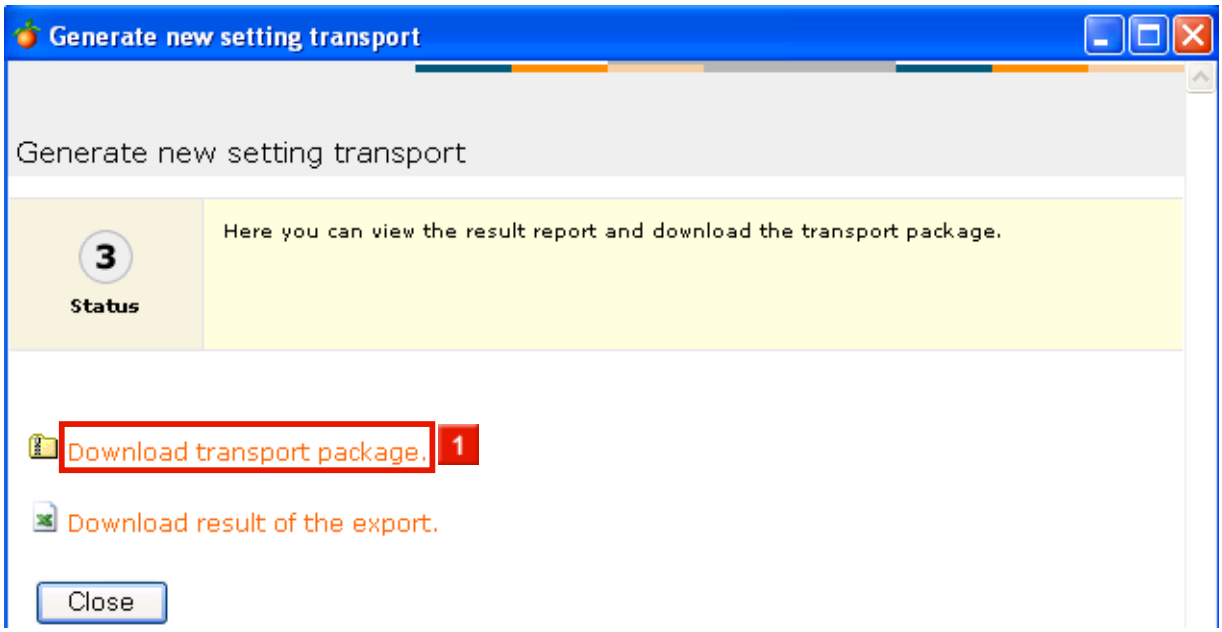
» 4 Click the **Object administration** tab.


Generate new setting transport
Generate new setting transport
2
Source
In this step, select the server settings to export. Maintenance roles and object properties can be exported at the moment. Thus, you in a position to export individual authorization structures and object definitions with their properties. You can switch between maintenance roles and object administration by selecting the appropriate tab. The export process is started in the next step.
Maintenance roles
Object administration
Here you can select which of the TT Integrator's settings should be exported.
Document
Document type
Glossary
Glossary entry
Glossary category
Course
Course section
Course category
1
Process
Process type
Organizational unit
Role
Topic
Maintenance role
< Back
2
Next >
Cancel

In the example, let's assume you would like to include all settings in the export. To do this, simply double-click any of the checkboxes, e.g. the **Process** checkbox.

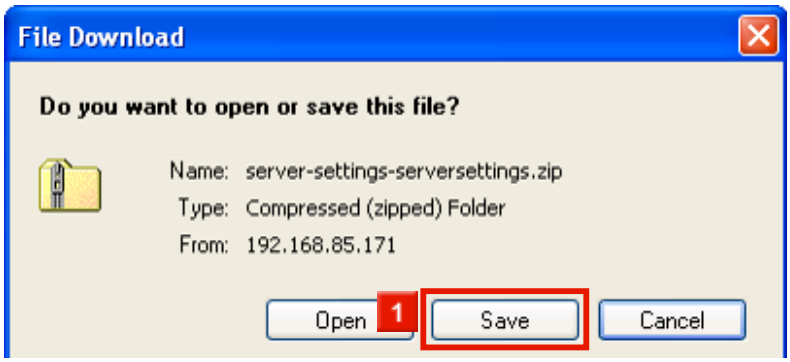
» 1 Double-click the **Process** checkbox.

» 2 Click the **Next >** button.

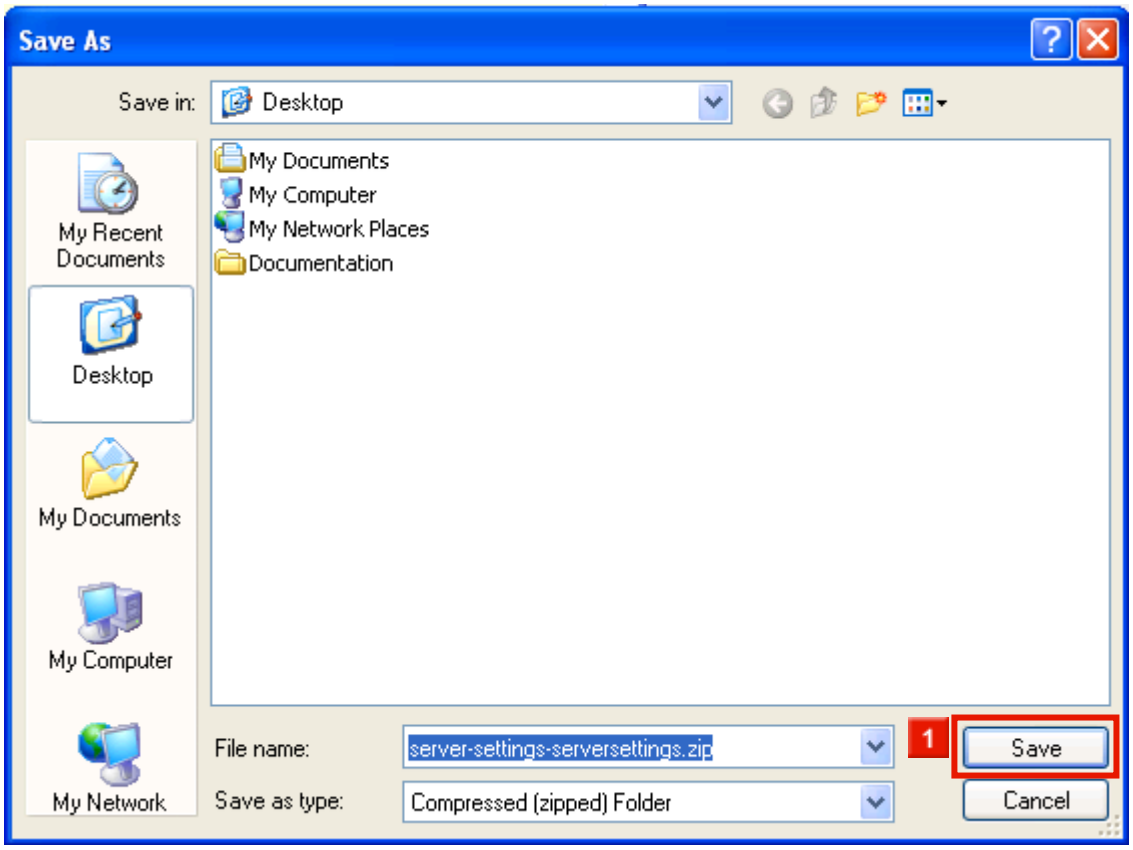


After a few seconds, the transport package is available for download.

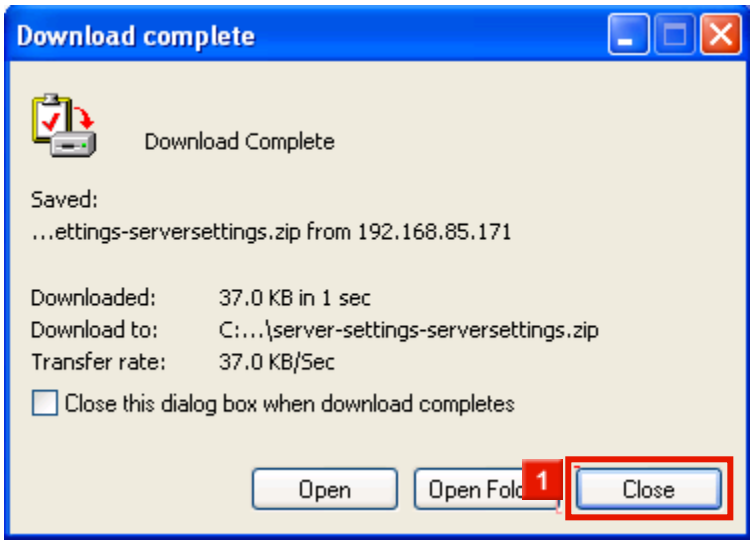
» 1 Click the **Download transport package.** hyperlink.



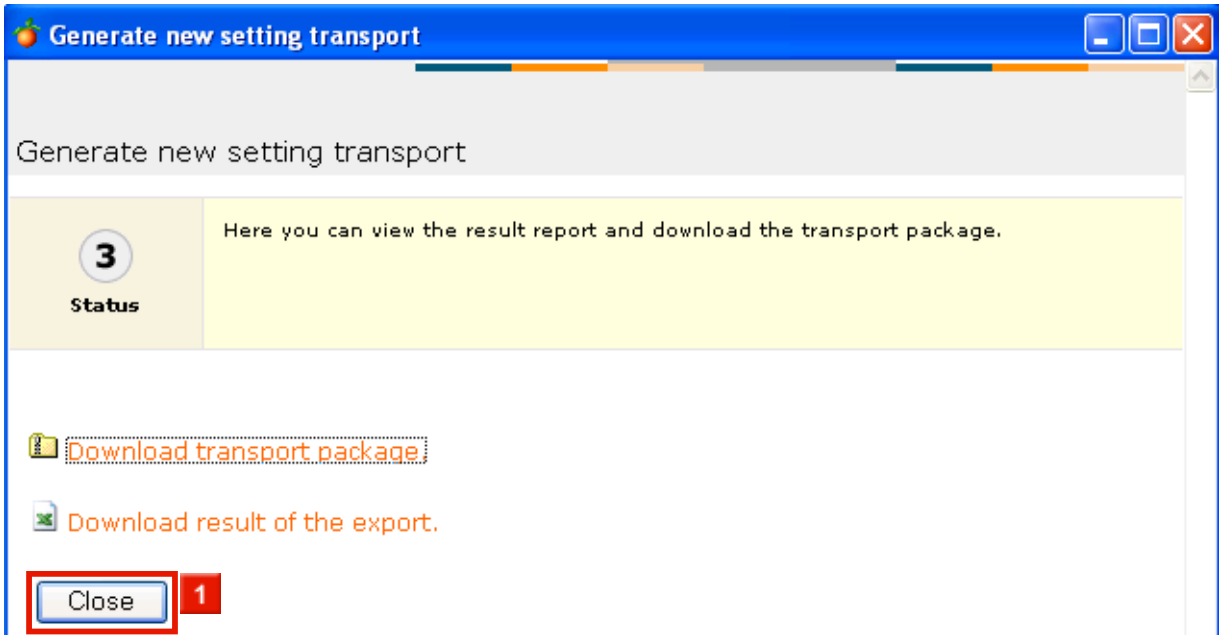
» 1 Click the **Save** button.



» 1 Click the **Save** button.

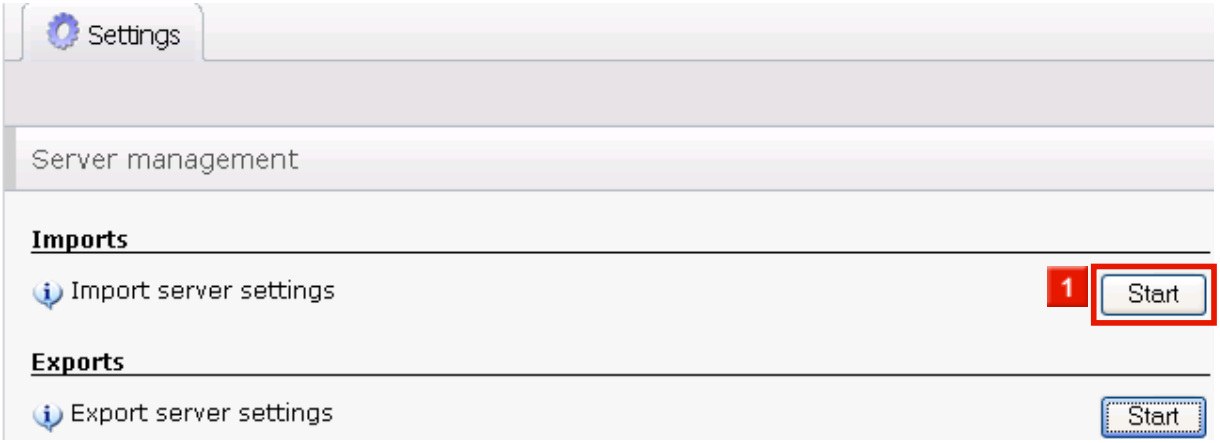


» 1 Click the **Close** button.

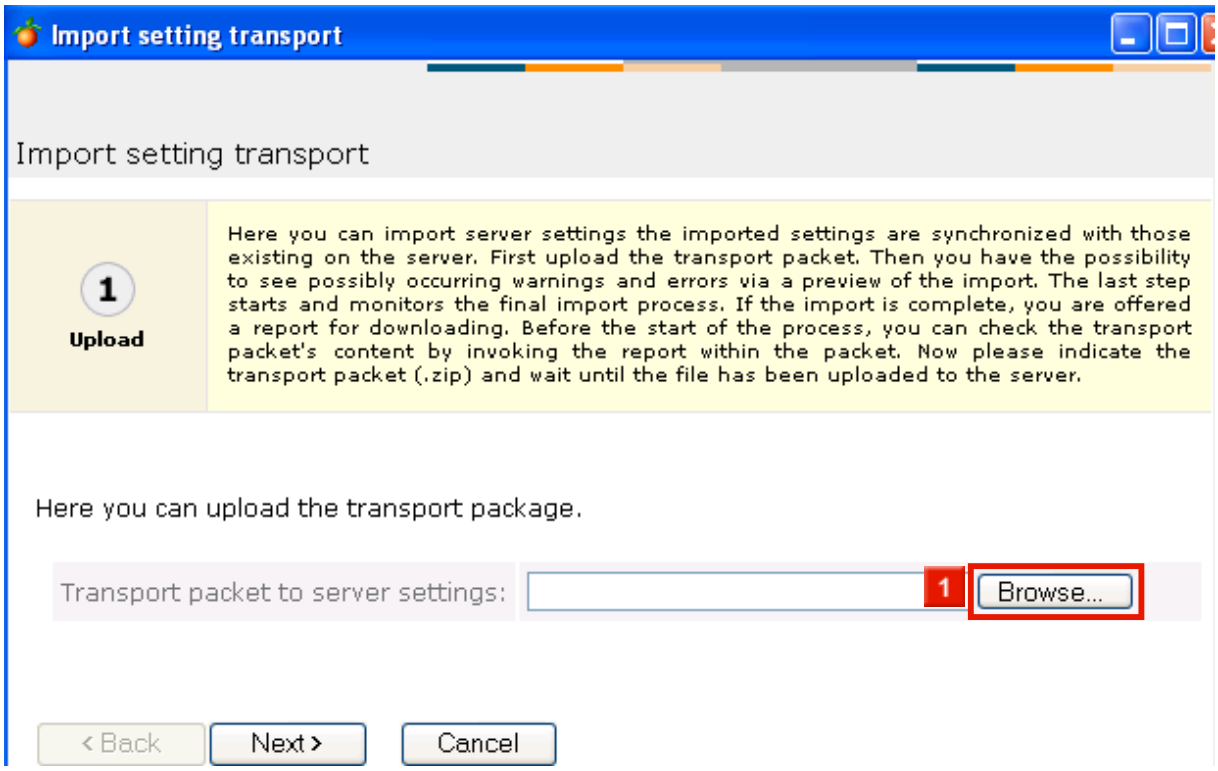


» 1 Click the **Close** button.

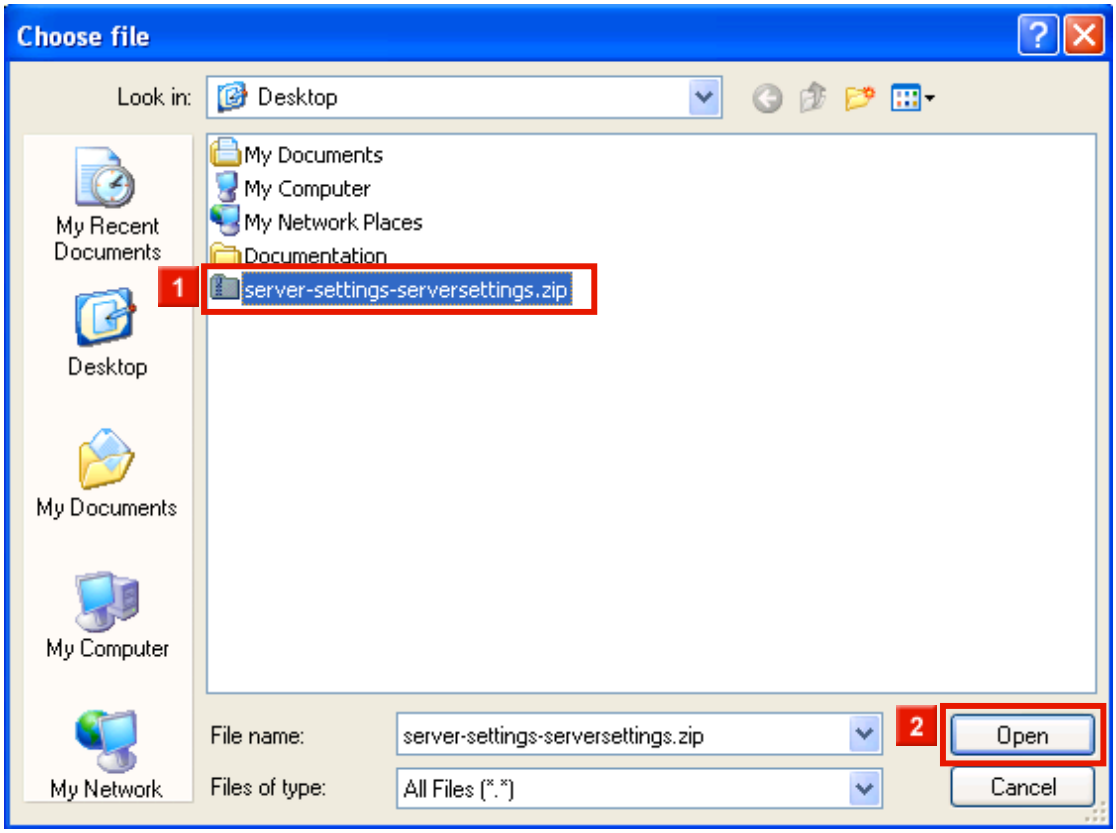
8.4.2 Import server settings



» 1 Click the **Start** button next to 'Import server settings'.

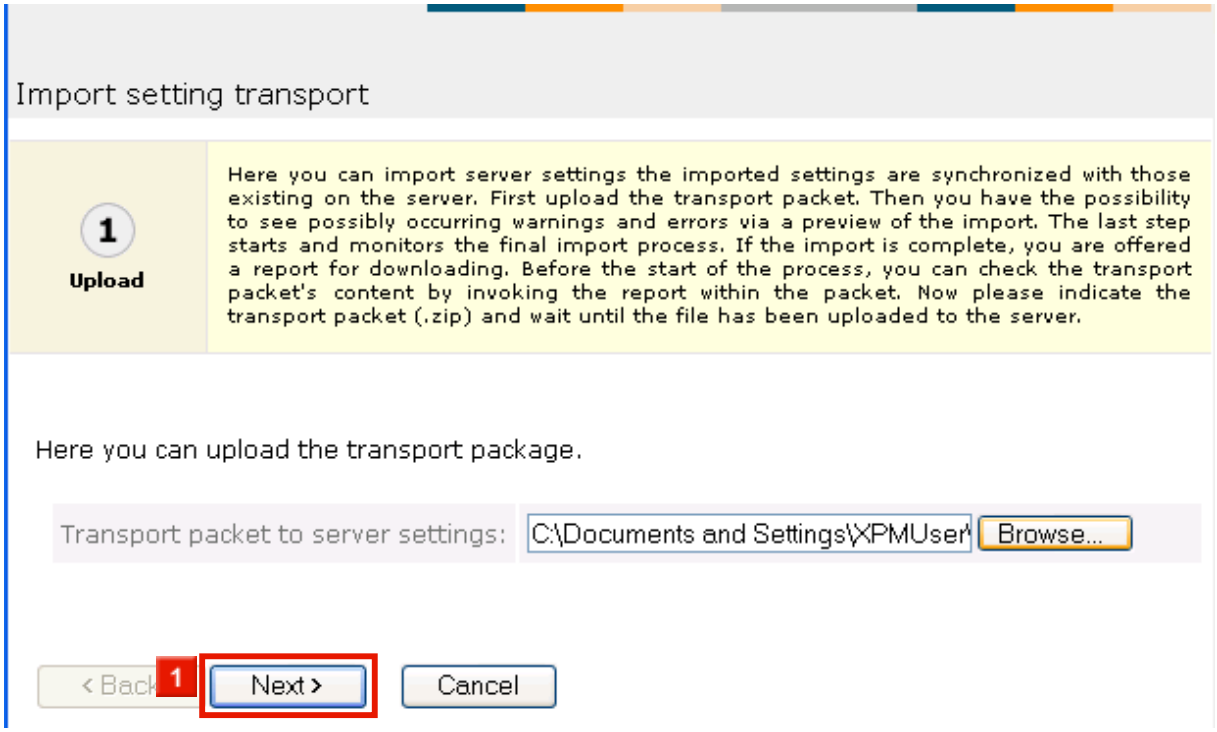

Import setting transport
Import setting transport
1
Upload
Here you can import server settings the imported settings are synchronized with those existing on the server. First upload the transport packet. Then you have the possibility to see possibly occurring warnings and errors via a preview of the import. The last step starts and monitors the final import process. If the import is complete, you are offered a report for downloading. Before the start of the process, you can check the transport packet's content by invoking the report within the packet. Now please indicate the transport packet (.zip) and wait until the file has been uploaded to the server.
Here you can upload the transport package.
Transport packet to server settings:
1
Browse...
< Back
Next >
Cancel

» 1 Click the **Browse...** button.

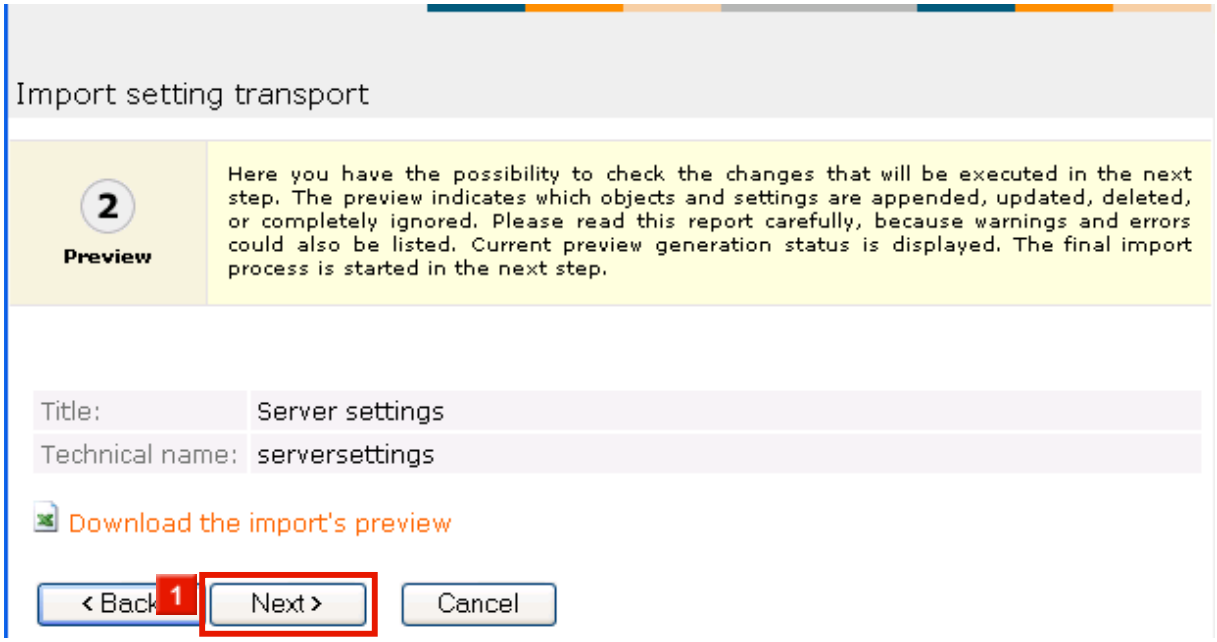


» 1 Click the **server-settings-serversettings.zip** list item.

» 2 Click the **Open** button.

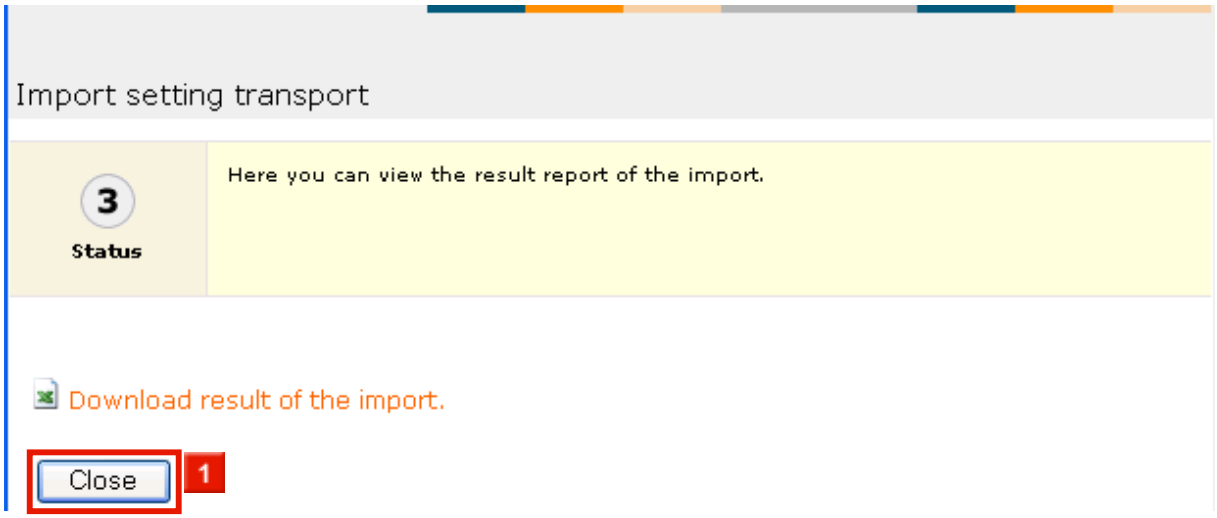

Import setting transport
1
Upload
Here you can import server settings the imported settings are synchronized with those existing on the server. First upload the transport packet. Then you have the possibility to see possibly occurring warnings and errors via a preview of the import. The last step starts and monitors the final import process. If the import is complete, you are offered a report for downloading. Before the start of the process, you can check the transport packet's content by invoking the report within the packet. Now please indicate the transport packet (.zip) and wait until the file has been uploaded to the server.
Here you can upload the transport package.
Transport packet to server settings:
C:\Documents and Settings\XPMUser\
Browse...
< Back
1
Next >
Cancel

» 1 Click the **Next >** button.


Import setting transport
2
Preview
Here you have the possibility to check the changes that will be executed in the next step. The preview indicates which objects and settings are appended, updated, deleted, or completely ignored. Please read this report carefully, because warnings and errors could also be listed. Current preview generation status is displayed. The final import process is started in the next step.
Title:
Server settings
Technical name:
serversettings
Download the import's preview
< Back
1
Next >
Cancel

To check the contents of the package, you may want to click the Download the import's preview hyperlink to see a summary of the settings to be imported (the summary comes in the form of an Excel file).

» 1 Click the **Next >** button.



The settings have been imported.

» 1 Click the **Close** button.

9 Importing structures from Excel

9.1 Excel import - the basics

Excel imports are carried out with the help of two files:

- a configuration file (containing the necessary technical information) and
- an Excel file (containing the necessary content-related information).

Each row of the Excel file contains a main dataset (process, document or user) that is about to be imported, as well as any additional information regarding secondary objects. This could involve maintenance roles, (process) roles or organizational units, for example.

If they don't already exist, secondary objects are generated and - where possible - automatically assigned to the main object.
Extractors are used for both the read-out and for interpreting the data. They are configured via the configuration file for the import.

9.1.1 Column extractors

There are three types of extractor:

- **Untyped extractors for object-specific attributes**

```
<extractor name="AnyName">
    <set-parameter name="column" value="A"/>
    <set-parameter name="property" value="language"/>
</extractor>
```

These extractors simply read-out the value at the corresponding position. It is, however, also possible to link them with value mappers (described below).

- **Typed extractors (**technicalName, entityValueList, propertyValue**)**

```
<extractor name=" AnyName " type="technicalName">
    <set-parameter name="column" value="B"/>
</extractor>
```

These extractors are used in various imports.

- **Specific extractors (**processStructure,processLevel**)**

These extractors are import-specific and perform specific tasks.

9.1.2 Column extractors

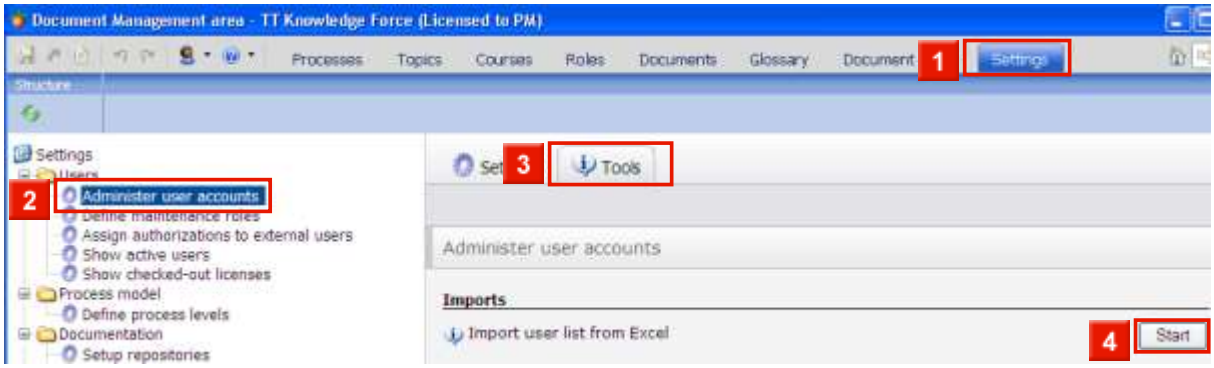
› The **value-mapping** construct**:**
value mappers can be used within the extractors. They merely replace values in the Excel file with substitute values.

```
<value-mapping>
    <mapping importValue="Global" systemValue="area"/>
    <mapping importValue="Prozess" systemValue="process"/>
    <mapping importValue="Prozessschritt" systemValue="processstep"/>
</value-mapping>
```

This function is particularly useful when one wants to replace abstract technical names with *human-readable* representations in the Excel sheets.

9.2 How to import user accounts and their settings from Excel

You can easily import user accounts and their settings from Excel. To do this:

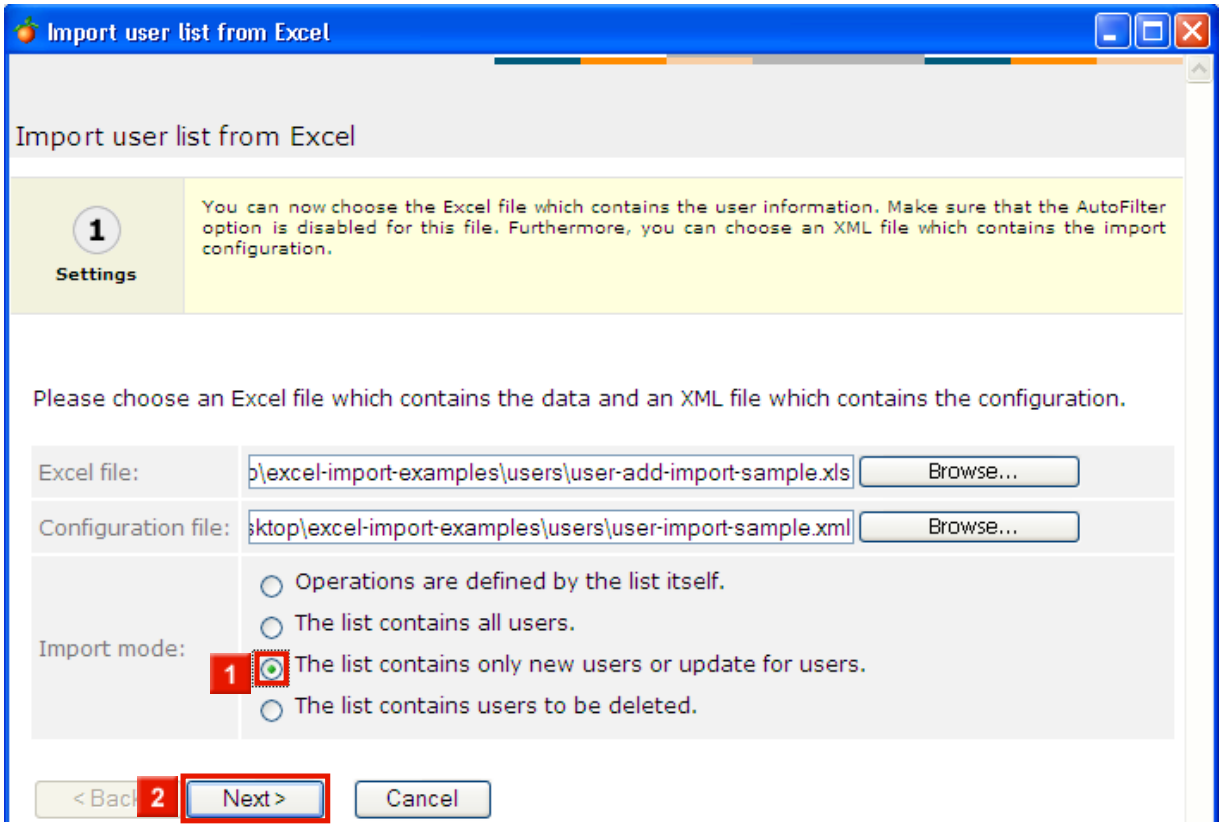


» 1 Click the **Settings** tab.

» 2 Click the **Administer user accounts** tree entry.

» 3 Click the **Tools** tab.

» 4 Click the **Start** button.

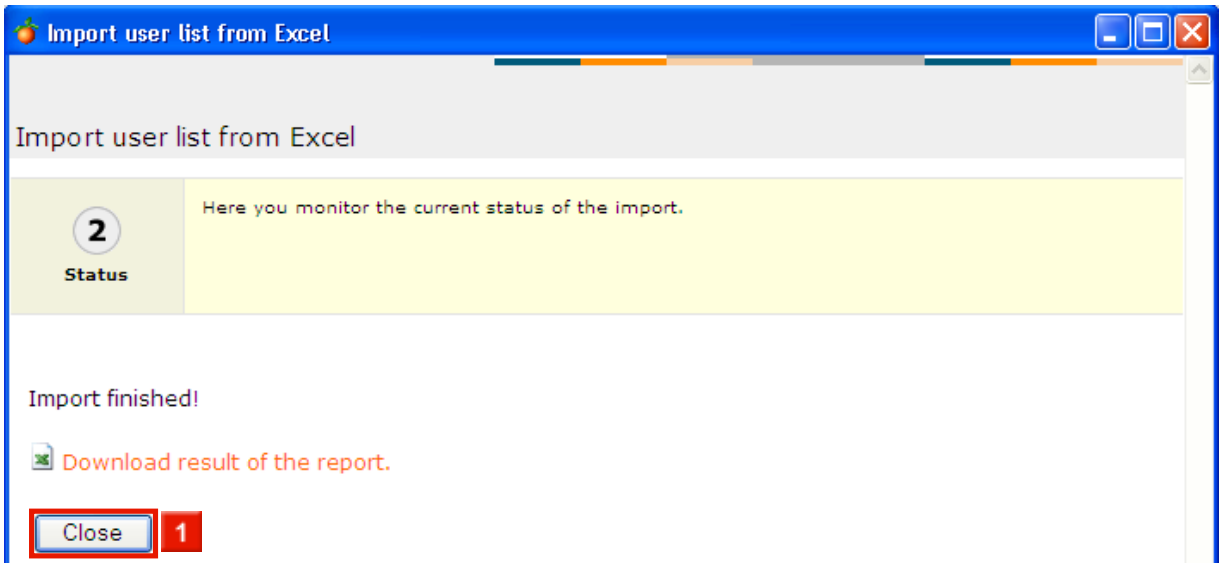

Import user list from Excel
Import user list from Excel
1
Settings
You can now choose the Excel file which contains the user information. Make sure that the AutoFilter option is disabled for this file. Furthermore, you can choose an XML file which contains the import configuration.
Please choose an Excel file which contains the data and an XML file which contains the configuration.
Excel file:
p\excel-import-examples\users\user-add-import-sample.xls
Browse...
Configuration file:
sktop\excel-import-examples\users\user-import-sample.xml
Browse...
Import mode:
Operations are defined by the list itself.
The list contains all users.
1
The list contains only new users or update for users.
The list contains users to be deleted.
< Back
2
Next >
Cancel

When performing a user Excel import, you can choose from the following options:

- Operations are defined by the list itself.
  When this is set, it is expected that the operation that is to be applied to the users (create, delete or update) is stored at each main dataset within the Excel file (please refer to the "Option" section under untyped extractors).
- The list contains all users.
  Existing users, who are not in the Excel sheet, will be deleted.
- The list contains only new users or updates for existing users.
  Only new users will be added, or existing users will be updated.
- The list contains users to be deleted.
  All users referred to in the list will be removed.

» 1 Click the **The list contains only new users or updates for existing users** check-box.

» 2 Click the **Next >** button.



» 1 Click the **Close** button.

9.3 User import via Excel: Configuration

General information on the user Excel import

When performing a user Excel import, you can choose from the following options:

- Operations are defined by the list itself.

  When this is set, it is expected that the operation that is to be applied to the users (create, delete or update) is stored

  at each main dataset within the Excel file. (please refer to the "Option" section under untyped extractors).

- The list contains all users.

  Existing users, who are not in the Excel sheet, will be deleted.

- The list contains only new users or updates for existing users.

  Only new users will be added, or existing users will be updated.

- The list contains users to be deleted.

  All users referred to in the list will be removed.

Each row of the Excel file contains a main dataset (a user) as well as optional secondary datasets for roles and/or author roles.

Both roles and author roles can be created with this import.

Roles and author roles are automatically assigned to the user (main dataset).

General parameters

Name	Value	Description
sheet	Examples: "sample" ("sample" sheet) "1" (1st sheet)	Name of the Excel sheet on which the import information is found, or the sheet no. (beginning with 1)
dataBeginRow	Integer value beginning with 1	Indicates the row where the data begins. "2", for example, would mean that the data starts on the second row. The first row can then be used for column headers.

Examples from the configuration file:

```
<!-- first two rows may be used as the header -->
<set-parameter name="dataBeginRow" value="3"/>
<!-- name of the Excel sheet to be used -->
<set-parameter name="sheet" value="sample"/>
```

The following untyped user import-specific extractors can be used.

Name	Value range	Description
operation	add, delete, update	Indicates whether the user is to be added, deleted or updated.
licgroup	The license group to be primarily used	Name of the primary license group
fblicgroup	The license group to be used secondarily	Name of the secondary (*fallback*) license group
checkoutlic	0,1	0 = User does not have the right to use concurrent licenses. 1 = User has the right to use concurrent licenses.
authmode	intern, extern, both	intern = Login via the Workbench extern = Login via LDAP both = User can use either of the two login variants
password	User's password	Password in plain text
ldapServer	ldap server ip and port e.g. ldapserverdomain:389	Is used by the Simple LDAP Login module to facilitate authentication via an LDAP server.
ldapUserDN	LDAP distinguished name of the user	The unambiguous LDAP name that is to be used to identify the user.
firstname	The user's first name	
lastname	The user's family name	

email	The user's e-mail address	
editLanguage	e.g. de-de, en-us, fr-fr	Editing language in RFC1766 (the default editing language will be used if this is not configured)
uiLanguage	e.g. de, en, fr	User interface language in ISO639 (the default user interface language will be used if this is not configured)
dialogSize	small, normal, big	Default normal
clipLength	Integer that indicates the length of the where-used list	Default 15

Parameters	**Function**
technicalName (mandatory)	Extracts the user's technical name. This is identical to the user's login name and is therefore necessary.
entityValueList (optional)	Extracts technical names from a comma-separated list of the secondary objects (roles / author roles) that are to be assigned. The roles / author roles will be created if they do not yet exist, and they will be automatically assigned to the user.

The following typed extractors can be used during the user import.

Parameters	**Value range**	**Description**
column	A - ZZ	Excel identifier for the column to be evaluated

Available parameters for the technicalName extractor:

Mode of operation:

As an input value, the **technicalName** extractor is given a column from which the user's username is to be read-out.

Example from the configuration file:

```
<extractor name="name" type="technicalName">
    <set-parameter name="column" value="B"/>
</extractor>
```

Example from the Excel file:

	A	B	C	D	E	F	G	H	I	J
1	Operation	Login name	Password	Auth-mode	Primary license group	Allow license checkout for concurrent licenses	First name	Family name	UI language	Editing language
2	add	tester1	tester1	Both	11111	1	Umberto	Eco	de	de-de

3	add	tester2	tester2	Intern	11112	1	Dan	Brown	de	de-de
4	add	tester3	tester3	extern	11113	0	Tom	Clancy	en	en-us

Parameters	Value range	Description
column	A-ZZ	Excel identifier for the column to be evaluated, with the titles of the roles or author roles. Titles are displayed in a comma-separated list here.
titleLanguage	Language code (RFC1766) e.g. de-de	To be used with the "column" parameter. This indicates the language to be used to search for a role / author role with the specified title.
idColumn	A-ZZ	Excel identifier for the column to be evaluated in which the technical names of the role / author role are found. Technical names are displayed in a comma-separated list here.
targetEntity	role, mrole	Indicates that objects of the (process) roles or author roles types are to be assigned. They will be created if they don't already exist.

Available parameters for the entityValueList extractor:

Mode of operation:

The **entityValueList** extractor supports two different ways of searching for existing objects.

- Via the technical names. The extractor is given a column - via the "idColumn" parameter - in which a comma-separated list of the technical names for roles / author roles is expected.
- Via the title of the object. The extractor is given a comma-separated list of titles for roles / author roles - via the "column" parameter - as well as the language, via the "titleLanguage" parameter. There is then a search for existing objects with these titles in the appropriate language.

If both exist, the search for existing objects always takes precedence over the technical names.

Roles and author roles that do not already exist will be created.

Roles and author roles are automatically assigned to the user (main dataset).

It's possible that several extractors of this type are found on the same row - e.g. an extractor for roles and an extractor for author roles.

It is currently not possible to hierarchically subdivide imported roles in the tree structure. All objects are created on the top level of the Role tree.

If technical names are indicated - but not the titles - the technical name will be used as the object title.

If the titles are indicated - but not the technical names - the technical name will be filled with the title (in a modified form if necessary).

Even when the "titleLanguage" has been indicated, the title will still always be created in the user's current editing language.

	A	B	C	D	E
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process
2	Process 1 - Level 1			Global	11111
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113
5	Process 1 - Level 1	Process 2 - Level 2	Process 4 - Level 3	Process step	11114

Example from the Excel file:

Example from the configuration file (assignment via the technical names of the process roles):

```
<!-- match roles using techn. names -->
 <extractor name="Roles" type="entityValueList">
        <set-parameter name="idColumn" value="L" />
         <set-parameter name="targetEntity" value="role" />
 </extractor>
<!-- match mroles using techn. names and author role titles in English -->
 <extractor name="MRoles" type="entityValueList">
        <set-parameter name="column" value="K"/>
         <set-parameter name="titleLanguage" value="en-us"/>
         <set-parameter name="idColumn" value="K" />
         <set-parameter name="targetEntity" value="mrole" />
 </extractor>
```

	A	B	C	D	E	F	G	H	I	J	K	L
1	Operation	Login name	Password	Auth-mode	Primary license group	Check out licenses	First name	Family name	UI language	Editing language	Maintenance roles - technical name	Roles - technical name
2	add	tester1	tester1	both	11111	1	Umberto	Eco	de	de-de	admin	
3	add	tester2	tester2	intern	11112	1	Dan	Brown	de	de-de	mrole1,Author	
4	add	tester3	tester3	extern	11113	0	Tom	Clancy	en	en-us	mrole1	role1,role2

Important:

The order in which the extractors appear within the configuration file is important.

The following order should be used:

- Operation (specific attribute)
- technicalName (Login name)
- Other user-specific attributes
- entityValueList assignments to roles / author roles.

Examples:

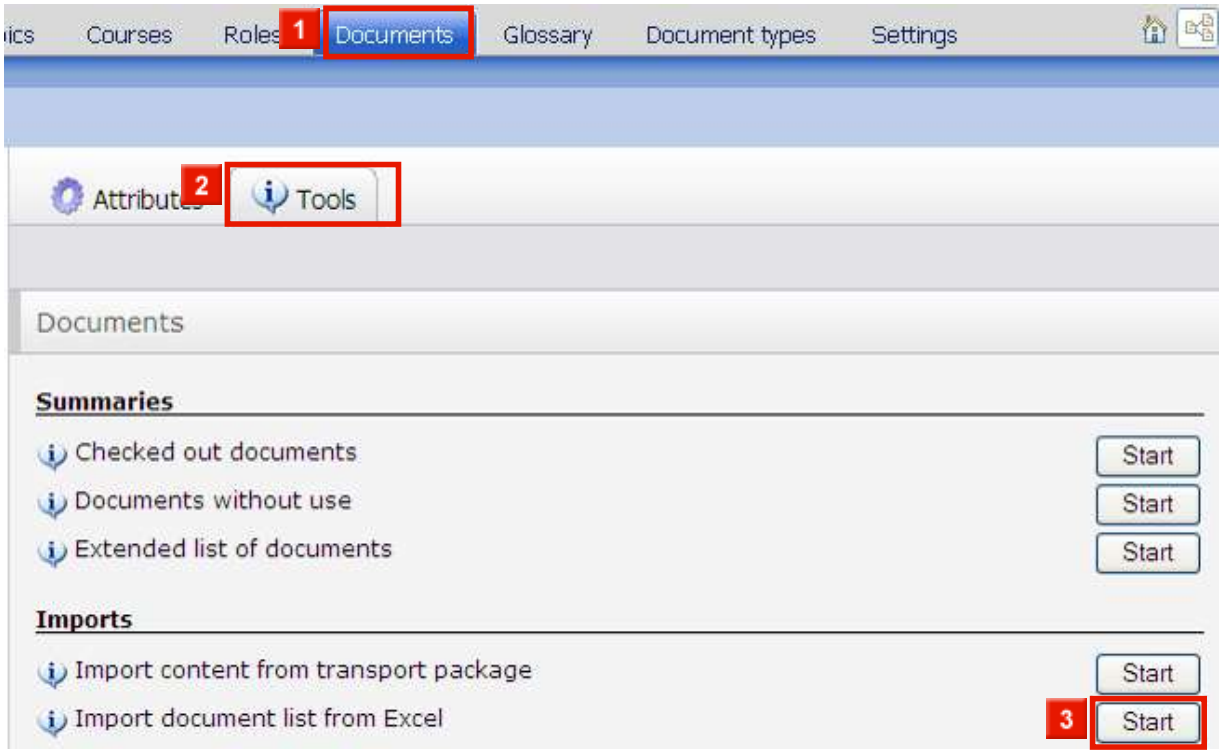
Sample files are included in the TT Knowledge Force package.
They can be found zipped in the Knowledge Force subfolder {TTKF HOME}/contrib/importsamples/excel-import-examples.zip

The ZIP file contains a subfolder named /users which contains the following files:

- user-add-import-sample.xls (Excel file for importing sample users)
- user-delete-import-sample.xls (Excel file for deleting sample users)
- user-import-sample.xml (Configuration file with the Import Descriptor for the sample import)

9.4 How to import documents along with their structures from Excel

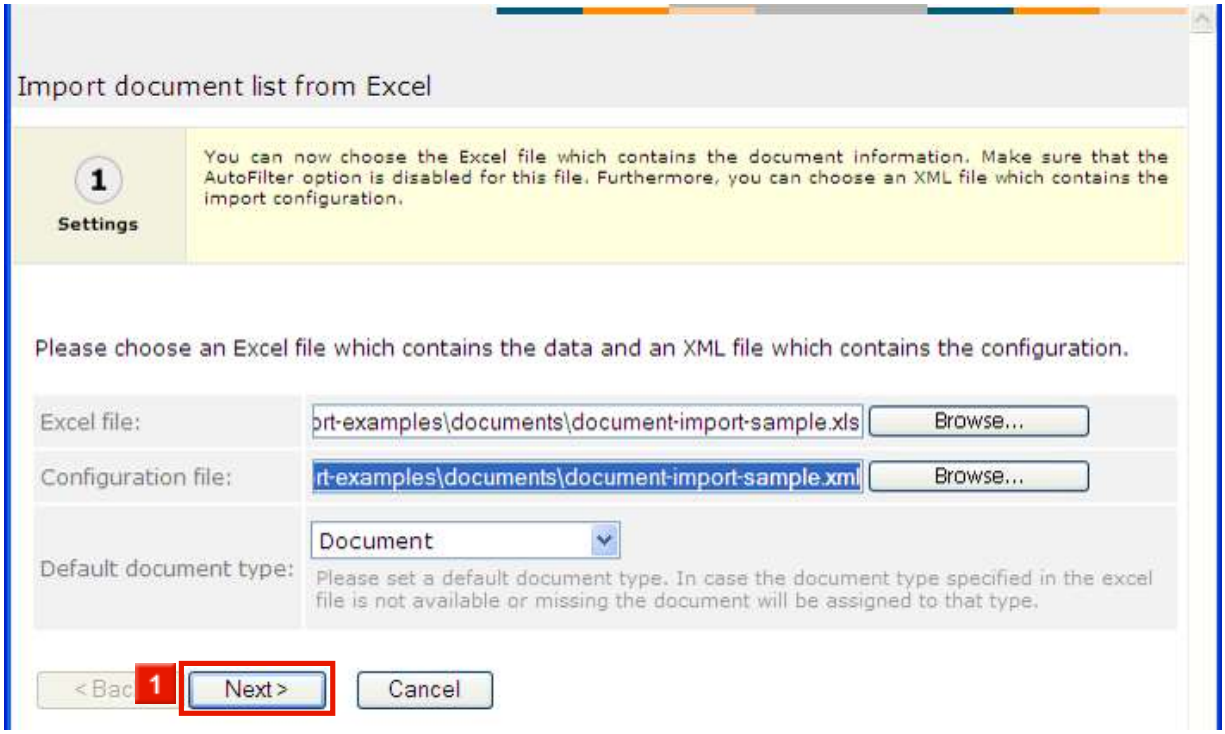
During our work on customer projects, we devised a function that facilitates the import of existing documents *en bloc*. This function – which has also been implemented as an administrator tool – is based on an Excel table that contains the attributes of documents, as well as the location where the associated document files have been stored.



» 1 Click the **Documents** tab.

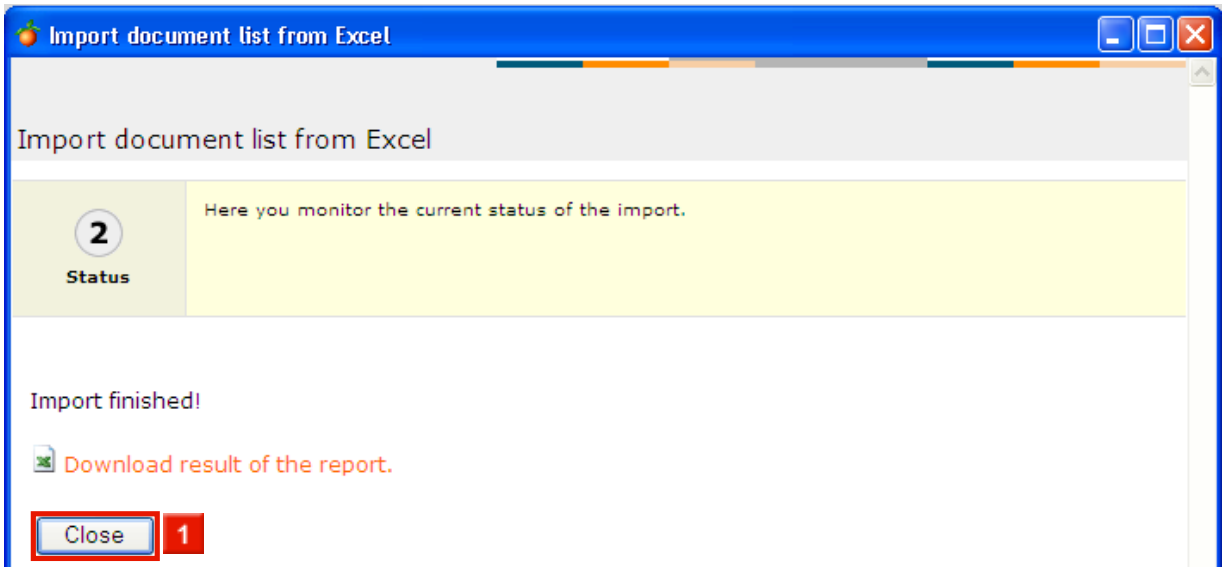
» 2 Click the **Tools** tab.

» 3 Click the **Start** button next to "Import document list from Excel".


Import document list from Excel
1
Settings
You can now choose the Excel file which contains the document information. Make sure that the AutoFilter option is disabled for this file. Furthermore, you can choose an XML file which contains the import configuration.
Please choose an Excel file which contains the data and an XML file which contains the configuration.
Excel file:
ort-examples\documents\document-import-sample.xls
Browse...
Configuration file:
rt-examples\documents\document-import-sample.xml
Browse...
Default document type:
Document
Please set a default document type. In case the document type specified in the excel file is not available or missing the document will be assigned to that type.
< Bac
1
Next >
Cancel

In the first step of the wizard, you have to select the appropriate **Excel file** (that contains the import description) and the corresponding **Configuration file** (XML).
You may also want to specify the **Default document type**, which will be assigned to all imported documents for which the type specified in the Excel file is not available.

» 1 Click the **Next** button.



In the second and last step of the wizard, you can choose to **Download the result** of the import process. It will be displayed as an Excel file.

» 1 To exit the dialog window: click the **Close** button.

9.5 Document import via Excel: Configuration

General information on the document Excel import

When performing a document Excel import, a standard document type has to be selected.

This will be used as the document type for the main dataset whenever the document type from the Excel file cannot be assigned.

Each row of the Excel file contains a main dataset (a document).

General parameters

Name	Value	Description
sheet	Examples: "sample" ("sample" sheet) "1" (1st sheet)	Name of the Excel sheet on which the import information is found, or the sheet no. (starting with 1)
importServerIn-stance	Technical name of the server instance for imported objects	Technical name of the server instance to which the import-ed objects are to be assigned. If it doesn't exist, a new server instance object will be created in the database.
dataBeginRow	Integer value beginning with 1	Indicates the row where the data begins. "2", for example, would mean that the data starts on the second row. The first row can then be used for column headers.

Examples from the configuration file:

<!-- first two rows may be used as the header -->
<set-parameter name="dataBeginRow" value="3"/>
<!-- name of the Excel sheet to be used -->
<set-parameter name="sheet" value="sample"/>

<!-- technical name of the server instance to be used/created -->
<set-parameter name="importServerInstance" value="importInstance"/>

Name	Value	Description
title	The document's title	The title has to be specified
language	The language of the document, e.g. de-de	The language has to be specified
resourceType	The document's resource/MIME type	The MIME type has to be specified, assuming you are not dealing with a placeholder document.
url	Relative URL within the file repository	The document's relative URL in the file repository. If a document with this URL already exists, only a placeholder will be imported (is merely used for checking – the actual document URL will be generated auto-matically).

repository	Technical name of the file repository	The file repository has to be assigned to the document type. If no file repository has been defined, the document will be created as a place-holder and will not have any content.
docType	Technical name of the document type	If no document type has been defined in the Excel file, the standard document type that was selected for the import will be used.
localPath	File path of the document that is to be imported	The local file system's path to the document that is to be imported. For example, (windows)"C:\x\y\file.txt" (unix) "/var/tmp/file.txt" If this attribute is not specified, the document will be imported as a placeholder and will not have any content.

The following attributes can be defined via an untyped extractor:

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated for the technical name
property	The name of the attribute to be filled	Techn. name of the meta attribute (e.g. description, language etc.)

Untyped extractors receive only two parameters.

Example from the configuration file (untyped extractor for the language):

```
<extractor name="LanguageOfTheDocument">
    <set-parameter name="column" value="A"/>
    <set-parameter name="property" value="language"/>
</extractor>
```

	A	B	C	D	E	F	G
1	**Language of the document**	**Title of the docu-ment**	**Description of the document**	**Technical name of the docu-ment type**	**Technical name of the file repository**	**Local path to the document**	**MIME type of the document**
2	de-de	Test document import (txt)	This is the test docu-ment in plain text.	document	rep1	C:\...\plaintext_document.txt	text/plain
3	de-de	Test document import (ppt)	This is the test docu-ment as a PowerPoint file.	document	rep1	C:\...\powerpoint_document.ppt	application/vnd.ms-powerpoint

4	de-de	Test document import (tt)	This is the TT test document.	document	rep1	C:\...\tt5_document.ttcp	application/x-teamtraining-sequence

Example from the Excel file:

Parameter	Function
technicalName (option-al)	Extracts the object's technical name (if no technical names have been specified, they will be generated automatically)
propertyValue (optional)	Extracts the value of a property that is assigned to the object (meta attribute)

Example from the configuration file (the document's technical name):

```
<extractor name="TechnicalNameOfTheDocument" type="technicalName">
    <set-parameter name="column" value="A/>
</extractor>
```

Example from the configuration file (the document's meta-attribute description – "de-scription" is the technical name of the meta attribute):

```
<extractor name="DescriptionOfTheDocument" type="propertyValue">
    <set-parameter name="column" value="D"/>
    <set-parameter name="systemProperty" value="description"/>
 </extractor>
```

The following typed extractors can be used during the document import.

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated

Available parameters for the technicalName extractor:

Mode of operation:

As its input value, the **technicalName** extractor is given a column from which the document's technical name is to be read out.

Example from the configuration file:

```
<extractor name="name" type="technicalName">
    <set-parameter name="column" value="D"/>
</extractor>
```

Example from the Excel file:

	A	B	C	D
1	**Language of the document**	**Title of the document**	**Description of the document**	**Technical name of the document**
2	de-de	Test document import (placeholder)	This is the test document as a placeholder.	document01

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated for the technical name
systemProperty	Technical name of the meta attribute	Techn. name of the meta attribute (e.g. description, language etc.)
partExpression	Regular expression	An optional regular expression. This describes the part of the meta attribute value that will actually be imported.

Available parameters for the propertyValue extractor:

Mode of operation:

As its input values, the **propertyValue** extractor is given the technical name of the meta attribute, as well as a column from which the value of the meta attribute is to be read-out.

Whenever you are dealing with a multilingual meta attribute, the meta-attribute value (assuming that the meta attribute for the object with the technical name exists) will always be created in the current editing language of the user carrying out the import.

Meta-attribute values of the meta-attribute lists type have to match the preconfigured ranges.

Example from the configuration file:

```
<extractor name="Description" type="propertyValue">
    <set-parameter name="column" value="C" />
    <set-parameter name="systemProperty" value="description"/>
</extractor>
```

Example from the Excel file:

	A	B	C	D
1	**Language of the document**	**Title of the document**	**Description of the document**	**Technical name of the document**
2	de-de	Test document import (placeholder)	This is the test document as a placeholder.	document01

Sample files are included in the TT Knowledge Force package.

They can be found zipped in the Knowledge Force subfolder {TTKF HOME}/contrib/importsamples/excel-import-examples.zip

The ZIP file contains a subfolder named /documents which contains the following files:

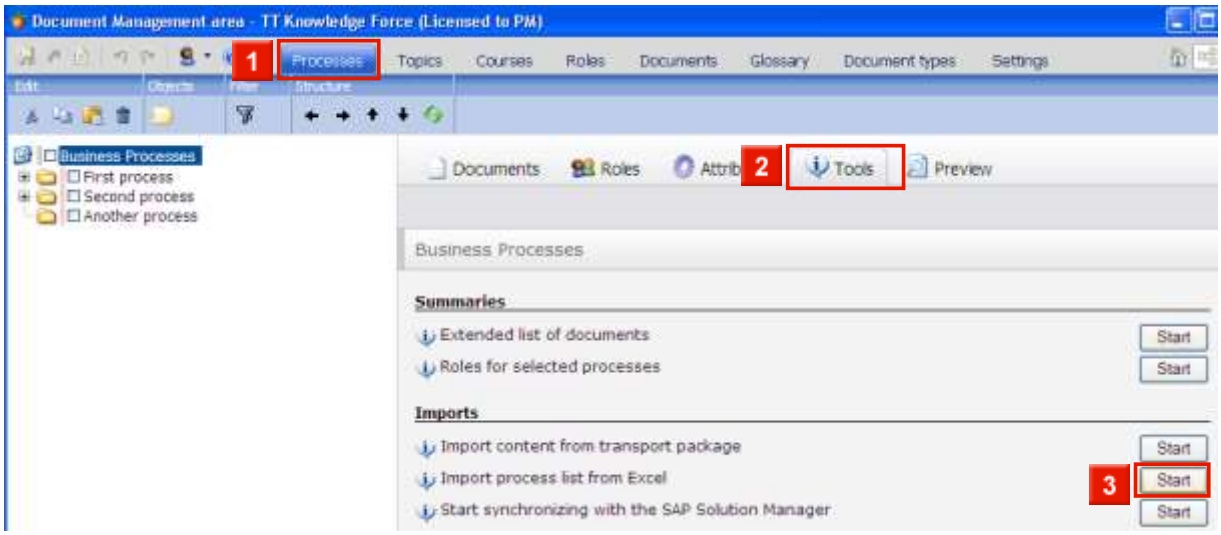
- document-import-sample.xls (Excel file for importing sample documents)
- document-import-sample.xml (configuration file with the Import Descriptor for the sample import)

Sample documents - with which the document import can be tested - are also included.

9.6 How to import existing process structures from Excel

The Workbench comes with a special function which facilitates the import of existing process structures from Excel tables. This means that you can skip the task of manually structuring a new process model.

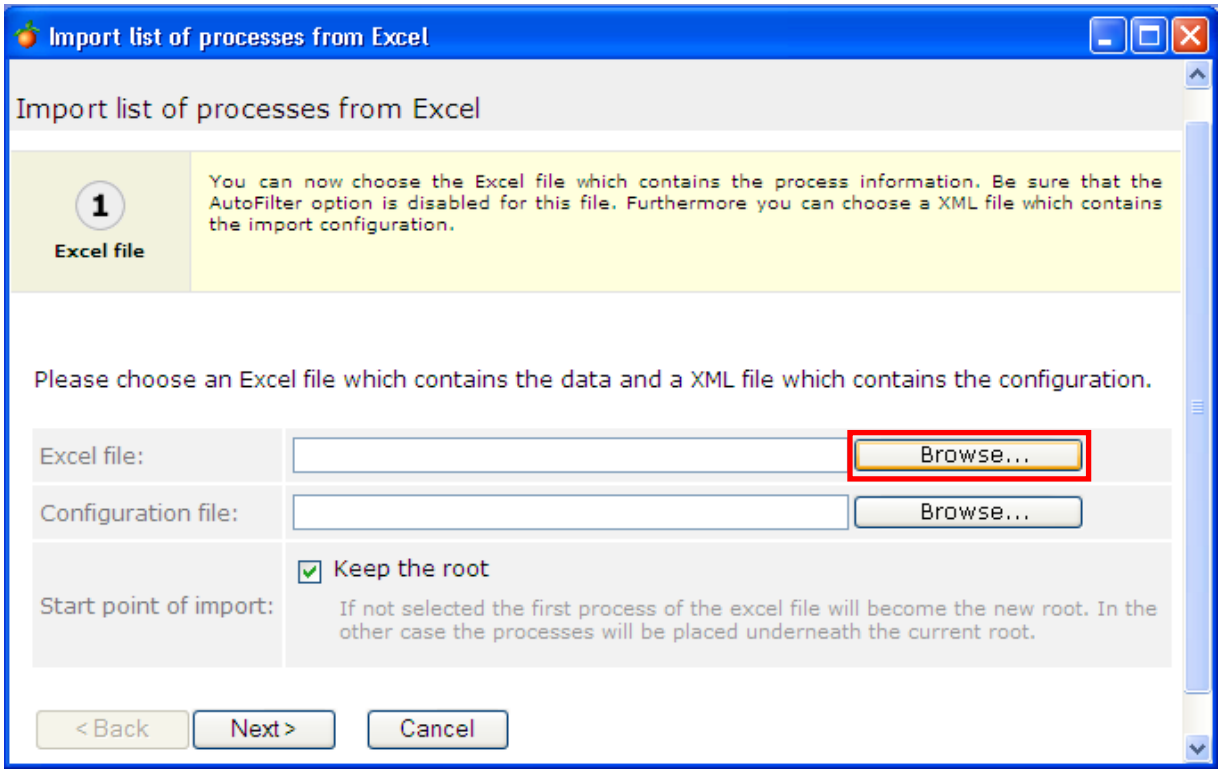
In addition to the process titles, any number of other process attributes can also be extracted – even the automatic recognition and assignment of roles is supported. The Process import function has been implemented as a tool and it can be accessed on the **Tools** tab in the **Processes** task.



» 1 Click the **Processes** tab.

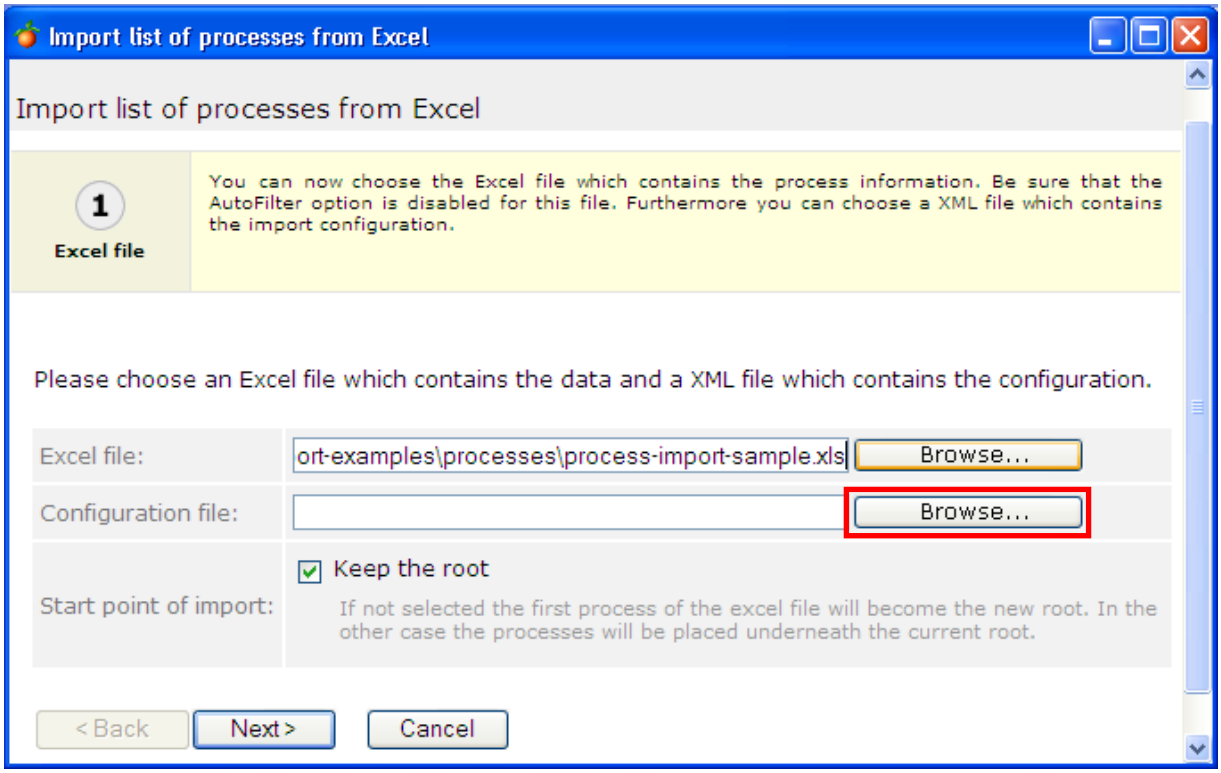
» 2 Click the **Tools** tab.

» 3 Open the Wizard for the report by clicking the appropriate Start button.


Import list of processes from Excel
Import list of processes from Excel
1
Excel file
You can now choose the Excel file which contains the process information. Be sure that the AutoFilter option is disabled for this file. Furthermore you can choose a XML file which contains the import configuration.
Please choose an Excel file which contains the data and a XML file which contains the configuration.
Excel file:
Browse...
Configuration file:
Browse...
Start point of import:
Keep the root
If not selected the first process of the excel file will become the new root. In the other case the processes will be placed underneath the current root.
< Back
Next >
Cancel

» Select the Excel table that you want to use for the import from the file system.

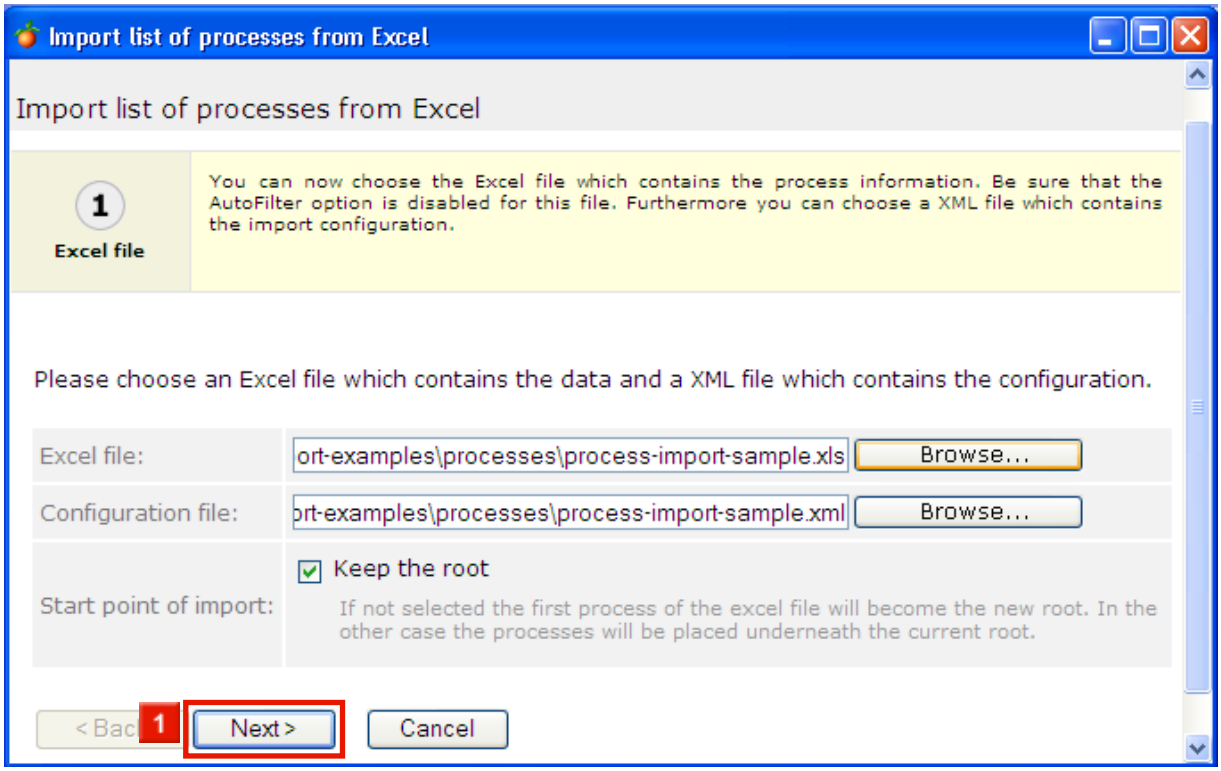
To ensure that the Excel file is imported without a hitch, it may not contain any AutoFilters. Please remove any AutoFilters before importing.


Import list of processes from Excel
Import list of processes from Excel
1
Excel file
You can now choose the Excel file which contains the process information. Be sure that the AutoFilter option is disabled for this file. Furthermore you can choose a XML file which contains the import configuration.
Please choose an Excel file which contains the data and a XML file which contains the configuration.
Excel file:
ort-examples\processes\process-import-sample.xls
Browse...
Configuration file:
Browse...
Start point of import:
Keep the root
If not selected the first process of the excel file will become the new root. In the other case the processes will be placed underneath the current root.
< Back
Next >
Cancel

In addition to selecting an Excel file, you should also choose an XML-based configuration file. The configuration file helps you to adapt the import mechanism to suit the actual structure of existing process tables. Among other things, it includes information on how the process information is distributed among the columns, which columns contain roles, etc.

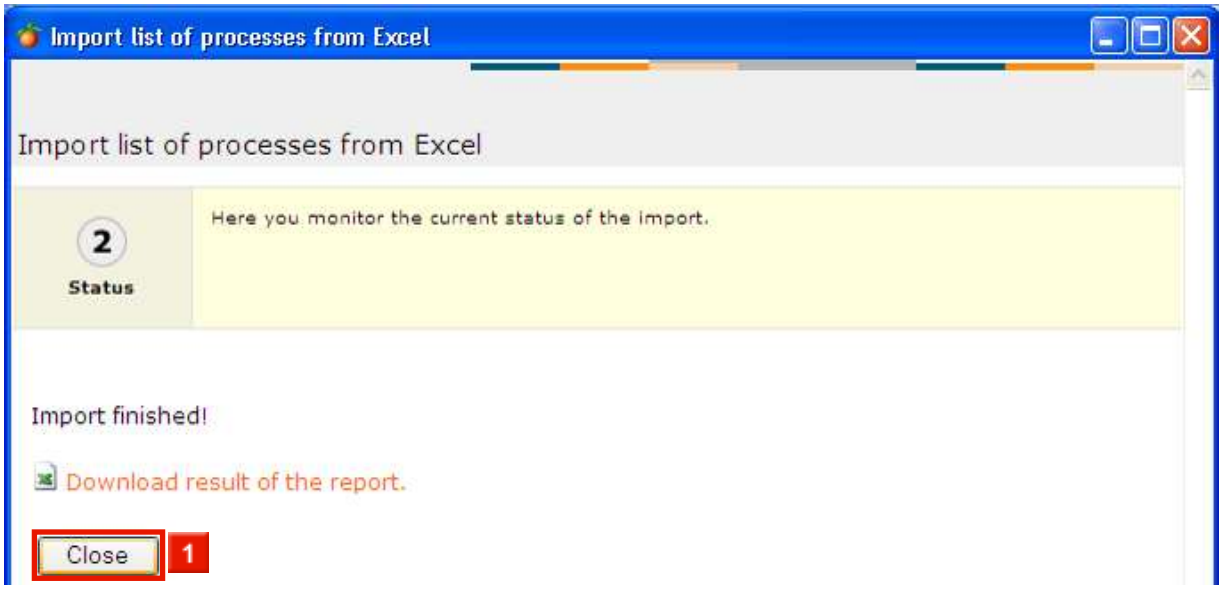
» Use the appropriate **Browse** button to select the configuration file from your file system.

Due to the enormous functional scope and flexibility of the import mechanism, we will not discuss the actual structure of the configuration file here. Please refer to the next chapter for details.


Import list of processes from Excel
Import list of processes from Excel
1
Excel file
You can now choose the Excel file which contains the process information. Be sure that the AutoFilter option is disabled for this file. Furthermore you can choose a XML file which contains the import configuration.
Please choose an Excel file which contains the data and a XML file which contains the configuration.
Excel file:
ort-examples\processes\process-import-sample.xls
Browse...
Configuration file:
ort-examples\processes\process-import-sample.xml
Browse...
Start point of import:
Keep the root
If not selected the first process of the excel file will become the new root. In the other case the processes will be placed underneath the current root.
< Bac
1
Next >
Cancel

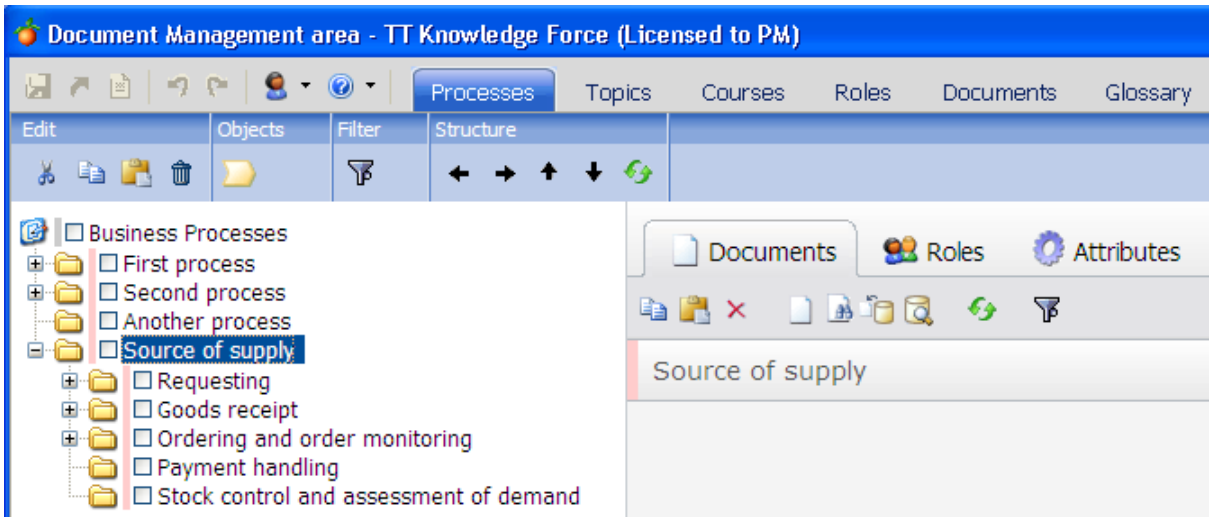
If you uncheck "Keep the root", you can force the current root process to be replaced by the first process in the Excel file.

» 1 Click the **Next>** button.



If you wish to download and check the **result of the import** (as an Excel file), click the red hyperlink.

» 1 Click the **Close** button.



The processes have been imported.

9.7 Process import via Excel: Configuration

General information on the process Excel import

The process Excel import also supports the option to retain the root process. If this is selected, the root node will be replaced with the root from the import. However, this also means that all processes that used to be in the Workbench will be lost.

Each row of the Excel file contains a main dataset (a process), as well as optional secondary datasets for roles / organizational units.

Both roles and organizational units can be created with this import. Roles are automatically assigned to the process (main dataset).

General parameters

Name	Value	Description
sheet	Examples: "sample" ("sample" sheet) "1" (1st sheet)	Name of the Excel sheet on which the import information is found, or the sheet no. (beginning with 1)
strategy	synchronizeProcesses	
importServerInstance	Technical name of the server instance for imported objects	Technical name of the server instance to which the imported objects are to be assigned. If it doesn't exist, a new server instance object will be created in the database.
dataBeginRow	Integer value beginning with 1	Indicates the row where the data begins. "2", for example, would mean that the data starts on the second row. The first row can then be used for column headers.

Examples from the configuration file:

<!-- first two rows may be used as the header -->
<set-parameter name="dataBeginRow" value="3"/>
<!-- name of the Excel sheet to be used -->
<set-parameter name="sheet" value="sample"/>

<!-- technical name of the server instance to be used/created -->
<set-parameter name="importServerInstance" value="importInstance"/>

<!-- always uses "synchronizeProcesses" -->

<set-parameter name="strategy" value="synchronizeProcesses"/>

Parameter	Function
technicalName (optional)	Extracts the technical name of the process (if no technical names have been specified, they will be generated automatically)
propertyValue (optional)	Extracts the value of a property that is assigned to the object (meta attribute)
entityValueList	Extracts technical names from a comma-separated list of the secondary objects (roles / organizational units) that are to be assigned.

The following typed extractors can be used during the process import.

Parameter	Function
processStructure	Extracts the position of the process within the Process tree
processLevel	Extracts the object's process level

The following process-specific extractors can be used.

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated

Available parameters for the technicalName extractor:

Mode of operation:

As its input value, the **technicalName** extractor is given a column from which the technical name of the process is to be read out.

Example from the configuration file:

<extractor name="name" type="technicalName">
    <set-parameter name="column" value="E"/>
</extractor>

Example from the Excel file:

	A	B	C	D	E	F
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process	Technical names of the assigned roles
2	Process 1 - Level 1			Global	11111	role1
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112	role1,role2
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113	role3

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated for the meta-attribute value
systemProperty	Technical name of the meta attribute	Techn. name of the meta attribute (e.g. description, language etc.)
partExpression	Regular expression	An optional regular expression. This describes the part of the meta-attribute value that will actually be imported.

Available parameters for the propertyValue extractor:

Mode of operation:

As its input values, the **propertyValue** extractor is given the technical name of the meta attribute, as well as a column from which the value of the meta attribute is to be read out.

Whenever you are dealing with a multilingual meta attribute, the meta-attribute value (assuming that the meta attribute with the technical name exists) will always be created in the current editing language of the user carrying out the import.

Meta-attribute values of the meta-attribute lists type have to match the preconfigured ranges.

	A	B	C	D	E	F
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process	Meta-attribute description
2	Process 1 - Level 1			Global	11111	A top-level process
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112	A second-level process
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113	A third-level process
5	Process 1 - Level 1	Process 2 - Level 2	Process 4 - Level 3	Process step	11114	Another third-level process

Example from the Excel file:

Example from the configuration file:

```
<extractor name="Description" type="propertyValue">
        <set-parameter name="column" value="F" />
        <set-parameter name="systemProperty" value="description" />
</extractor>
```

Parameter	Value range	Description
column	A - ZZ	Excel identifier for the column to be evaluated with the technical name of the process level
emptyStrategy	parentSuccessor	Adds the process level (assuming it's new) of the preceding process level. If no preceding process level exists, it will be added at the end.
value mapping		Specification regarding the conversion of the Excel identifier into the technical name of a process level.

Available parameters for the processLevel extractor:

Mode of operation:

The **processLevel** extractor reads out the specified column, converts the process level's identifier into its technical name and assigns the appropriate process level to the process.

The following fallback mechanisms are used for this:

- If a process level with this technical name exists, it will be used.
- If the superior process (parent node) has a process level which also has a subordinate process level, the subordinate process level will be assigned to the process.
- The same process level as that from the preceding imported process will be selected.

Value-mapping (optional)

Thanks to *value mapping*, the Excel file may contain *human-readable* identifiers for process levels. They will then be replaced with their technical names by the extractor. The specification regarding how they are to be converted can be found in the *value-mapping* element.

Parameter	Value range	Description
importValue	Arbitrary	Human-readable identifier for the process level
systemValue	Technical name of the process level	The tech. name of the process level

	A	B	C	D	E
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process
2	Process 1 - Level 1			Global	11111
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113
5	Process 1 - Level 1	Process 2 - Level 2	Process 4 - Level 3	Process step	11114

Example from the Excel file:

Example from the configuration file:

```
<extractor name="ProcessLevel" type="processLevel">
    <set-parameter name="column" value="D"/>
    <set-parameter name="emptyStrategy" value="parentSuccessor"/>
    <value-mapping>
        <mapping importValue="Global" systemValue="area"/>
        <mapping importValue="Process" systemValue="process"/>
        <mapping importValue="ProcessStep" systemValue="processstep"/>
    </value-mapping>
</extractor>
```

Parameter	Value range	Description
startColumn	A - ZZ	Excel identifier for the first column to be evaluated
endColumn	A - ZZ	Excel identifier for the last column to be evaluated
strategy	fullpath	

Available parameters for the processStructure extractor:

Mode of operation:

The **processStructure** extractor is given a series of columns as its input values.
Each of these columns in the Excel sheet contains a level from the Process tree.
Put another way, one cell contains the title of the process in the corresponding level.
The processes (identified via their titles) from the lower levels are structured hierarchically according to the sequence quoted in the processes tree structure.
Each dataset therefore contains the title of the process to be created, as well as its predecessors' titles in the Process tree.

The title of the process is always created in the current editing language of the user carrying out the import.

You need to ensure that the processes that are specified as predecessors either already exist or were imported before the actual process/dataset.

	A	B	C	D	E
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process
2	Process 1 - Level 1			Global	11111
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113
5	Process 1 - Level 1	Process 2 - Level 2	Process 4 - Level 3	Process step	11114

Example from the Excel file:

Example from the configuration file:

```
<extractor name="ProcessStructure" type="processStructure">
    <set-parameter name="strategy" value="fullpath"/>
    <set-parameter name="startColumn" value="A"/>
    <set-parameter name="endColumn" value="C"/>
</extractor>
```

Parameter	Value range	Description
column	A-ZZ	Excel identifier for the column to be evaluated, with the titles of the roles or organizational units. Titles are displayed in a comma-separated list here.
titleLanguage	Language code (RFC1766) e.g. de-de	To be used with the "column" parameter. This indicates the language to be used to search for a role / organizational unit with the specified title.
idColumn	A-ZZ	Excel identifier for the column to be evaluated in which the technical names of the role / organizational unit are found. Technical names are displayed in a comma-separated list here.
targetEntity	role, orgunit	Indicates that objects of the (process) roles or organizational units types are to be assigned. They will be created if they don't already exist.

Available parameters for the entityValueList extractor:

Mode of operation:

The **entityValueList** extractor supports two different ways of searching for existing objects.

- Via the technical names. The extractor is given a column - via the "idColumn" parame-

ter - in which a comma-separated list of the technical names for roles / organizational units is expected.

- Via the title of the object. The extractor is given a comma-separated list of titles for roles / organizational units - via the "column" parameter - as well as the language, via the "titleLanguage" parameter. There is then a search for existing objects with these titles in the appropriate language.

If both exist, the search for existing objects always takes precedence over the technical names.

Roles and organizational units that do not already exist will be created.

Roles will be assigned to the process (main dataset), whereas organizational units will be merely created.

If a single row contains both an extractor for roles and an extractor for organizational units, this does not mean that the role is subordinate to the organizational units.

It is currently not possible to hierarchically subdivide imported roles or organizational units in the tree structure. All objects are created on the top level of the Role tree.

If technical names are indicated - but not the titles - the technical name will be used as the object title.

If the titles are indicated - but not the technical names - the technical name will be filled with the title (in a modified form if necessary).

Even when the "titleLanguage" has been indicated, the title will still always be created in the user's current editing language.

	A	B	C	D	E
1	Process title on level 1	Process title on level 2	Process title on level 3	Process level no.	Technical name of the process
2	Process 1 - Level 1			Global	11111
3	Process 1 - Level 1	Process 2 - Level 2		Process	11112
4	Process 1 - Level 1	Process 2 - Level 2	Process 3 - Level 3	Process step	11113
5	Process 1 - Level 1	Process 2 - Level 2	Process 4 - Level 3	Process step	11114

Example from the Excel file:

Example from the configuration file (assignment via the technical names of the process roles):

```
<extractor name="Roles" type="entityValueList">
    <set-parameter name="idColumn" value="F" />
    <set-parameter name="targetEntity" value="role" />
</extractor>
```

Important:

The order in which the extractors appear within the configuration file is important.

The following order should be used:

- technicalName
- processStructure
- processLevel
- entityValueList
- propertyValue

Examples:

Sample files are included in the TT Knowledge Force package.

They can be found zipped in the Knowledge Force subfolder

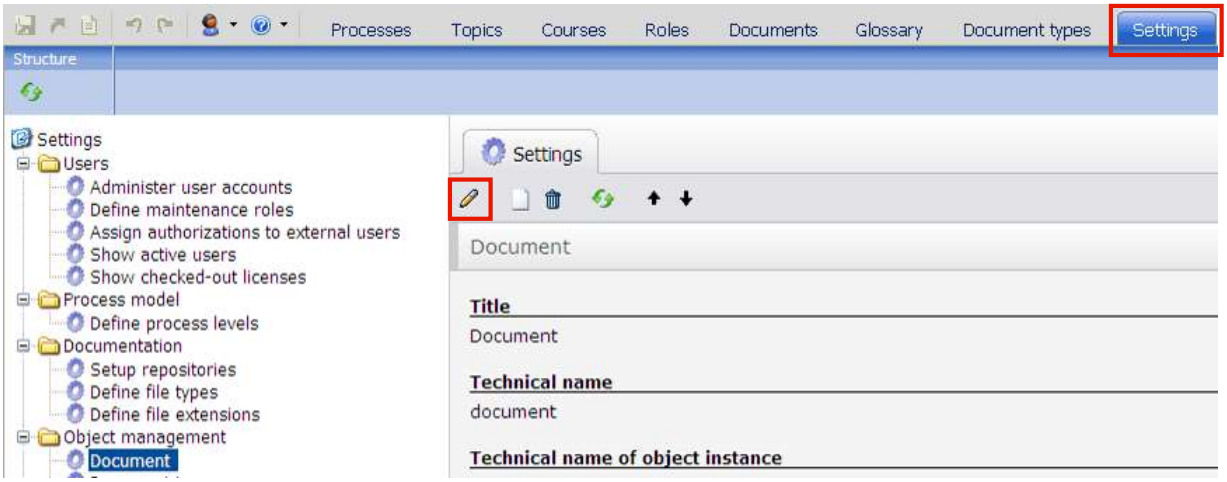
{TTKF HOME}/contrib/importsamples/excel-import-examples.zip

The ZIP file contains a subfolder named /processes which contains the following files:

- process-import-sample.xls (Excel file for importing sample processes)
- processt-import-sample.xml (configuration file with the Import Descriptor for the sample import)

9.8 Setting up which information is displayed in the list view

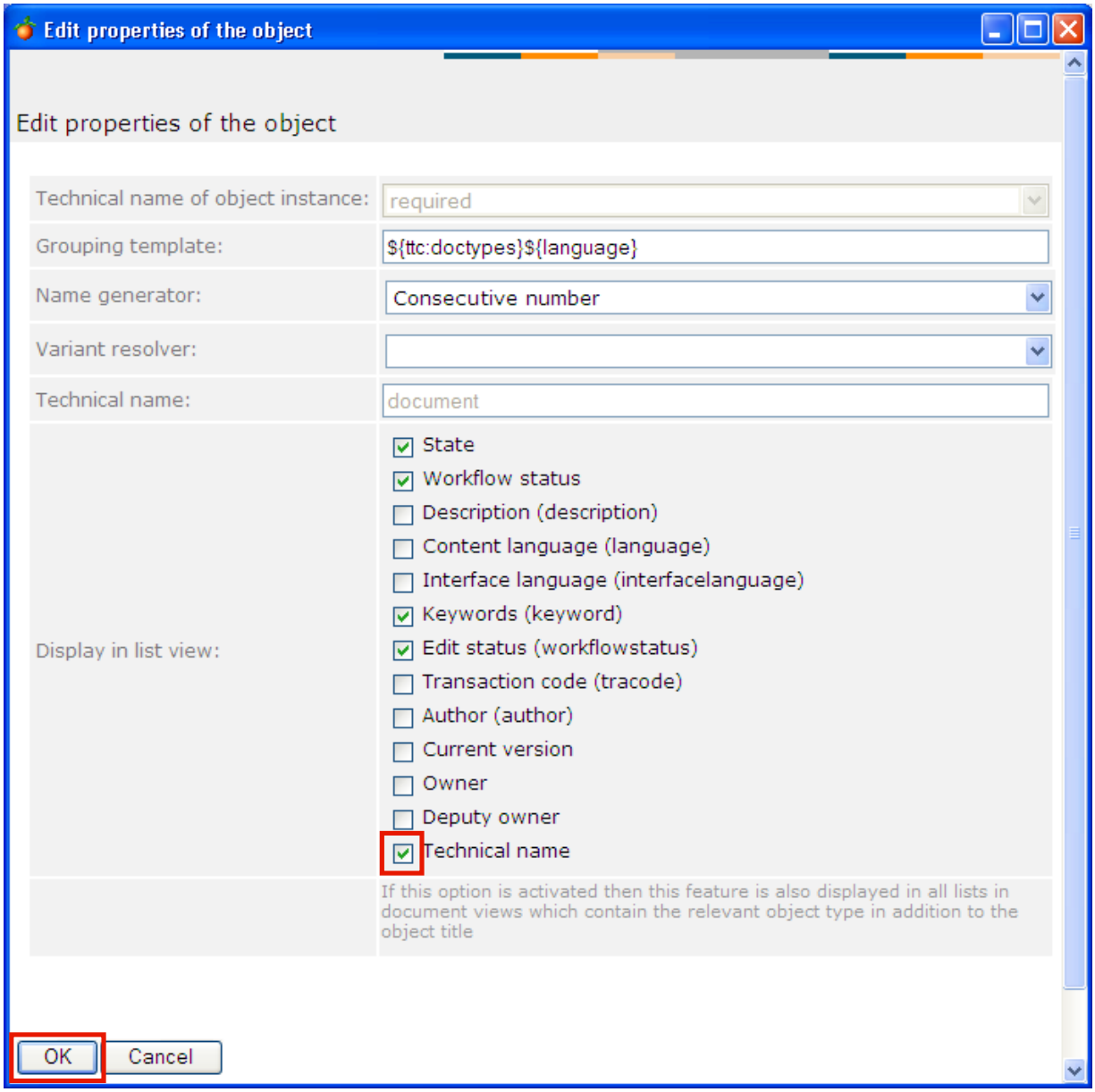
You can customize which data is displayed in the list view. In this example, the "Documents" list in the "Processes" view is to be modified to include the technical names of the listed documents.To accomplish this:



» Click the **Settings** tab.

As the list settings for the "Document" object are to be changed, "Document" must be selected in the tree on the left (below Object management). As this is already high-lighted, you can simply proceed now.

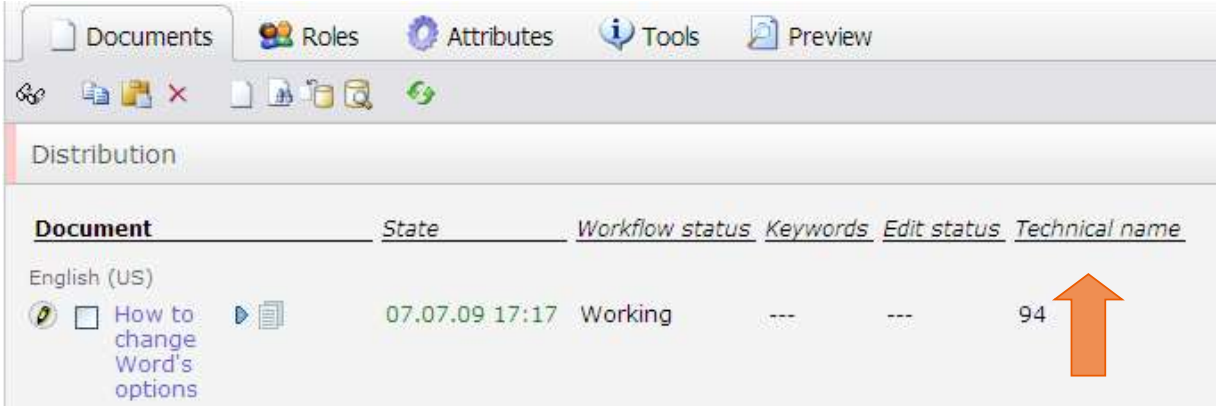
» Click the **Edit entity...** button.



» Click the **Technical name** checkbox.

» Click the **OK** button.

» Click the **Processes** tab.



As you can see, the list now contains the **Technical name** property which was just selected.

10 Configuration

10.1 The web application's configuration files

Where to find XML-based configuration files

Configuration files are included in the initial Workbench installation and are therefore accessible to the server administrator only. They can be found in the /WEB-INF subfolder in the installation directory.

application-config.xml

Basic Workbench application settings, such as those involving the connection to the database server, should be made in the application-config.xml configuration file. Since these basic settings always have to be customized to suit your actual infrastructure, the installation archive only has a single sample file - application-config.sample.xml.

<service>

<service-name>***Servicename***</service-name>

<service-class>***Service-class(Java)***</service-class>

<init-param>

<param-name>***NameFirstInitialParameter***</param-name>

<param-value>***ValueFirstInitialParameter***</param-value>

</init-param>

...

<init-param>

<param-name>***NameLastInitialParameter***</param-name>

<param-value>***ValueLastInitialParameter***</param-value>

</init-param>

</service>

The various services – and their associated initial parameters – are described below.

This should be regarded as a template for creating the actual application-config.xml. Start by copying the sample file, then rename the copy to application-config.xml and then proceed to make modifications to this file.

properties: Service for general configuration options (class: **de.tts.bd.business.PropertiesService)**

Initial parameters	Description and permissible values
applicationType	Component identification for this web application. **Example**: "WebWorkbench" for the Workbench, "PortalFoundation" for the Web Publisher
customerKey	Technical identification of the customer, used to enable customer specific features. **Example**: tts

acceleratorContextPath	Path to The Web Publisher (if installed). The Preview tabs and some other features like the WBT creation will not work unless this parameter has been set properly. **Example**: "/publisher/“
allowLoginCookie	If this option has been set to 'yes', the Workbench supports a cookie-based automatic login. **Permissible values:** "yes" or "no"
documentAccessParanoia	This function is for ensuring that the access of users in possession of read-only rights is restricted to the extent that the downloading or printing of documents can only be done with tricks. **Permissible values:** "yes" or "no"
autoManageDocumentLanguage	Multilingual metadata of a document are managed automatically, depending on the documents content language **Permissible values:** "yes" or "no" (default is "no")
superuserIPs	Comma-separated list of IP addresses which are allowed to use super user function (like DB initialization)
applicationServerLogDirectory	Absolute path to the directory of the application servers logs (optional)
qaIndexLength	Sets the maximum length of an index entry of a QuickAccess signature, use 0 for no length restriction
qaWildcardRestriction	Sets the restriction for level-wildcard assignment (generic signature). **1**: level is required and cannot used as wildcard **0**: level can be assigned as wildcard by user. (default:1001)
serverUrl	sets the server URL and contextpath of the application; used by the content transport for backtracking the imported objects

language: Language service (class: de.tts.bd.business.LanguageService)

Initial parameters	Description and permissible values
available.edit.languages	Comma-separated list of available content languages (set value to "*" to use all languages from the license key) in RFC 1766 format **Example:** "de-de,en-us,fr-fr"
default.edit.language	Default content language in RFC 1766 format. This setting is primarily used in the dialog for creating a new user. **Example:** "en-us“
available.interface.languages	Comma-separated list of available interface languages (corresponding language bundles must exist) in ISO 639 format. **Example:** "de,en,es"
default.interface.language	Default interface language in ISO 639 format. **Example:** "de", "en" or "es"

data: Database service (class: de.tts.bd.business.HibernateService)

Initial parameters	Description and permissible values
hibernate.connection.driver_class	Database driver class. **Example:** MS SQL Server 2000**:** "net.sourceforge.jtds.jdbc.Driver" Oracle 10g: "oracle.jdbc.OracleDriver" Other database servers are only supported upon request.
hibernate.connection.url	DBMS-specific URL for controlling the database. **Example:** MS SQL Server 2000: "jdbc:jtds:sqlserver://localhost:1433/ttkf" Oracle 10g: jdbc:oracle:thin:@localhost:1521:orcl Other database servers are only supported upon request.
hibernate.connection.username	Name of the database user for establishing a connection. **Example:** "tts"
hibernate.connection.pool_size	Number of database connections that are in use simultaneously. **Default setting:** "5"
hibernate.dialect	DBMS-specific instruction set for the Hibernate mapper. **Example:** MS SQL Server 2000**:** "de.tts.bd.business.data.UnicodeSQLServerDialect" Oracle 10g: "org.hibernate.dialect.Oracle9Dialect" Other database servers are only supported upon request.
hibernate.show_sql	Determines whether all SQL commands are to be written in the log file ('true' or 'false'). **Default setting:** "false"
hibernate.connection.username	name of the database user
hibernate.default_schema	Name of the default schema
hibernate.connection.password	password of the database user
hibernate.c3p0.min_size	Minimal size of the connection pool, i.e. minimum numbers of open connections to the database
hibernate.c3p0.max_size	Maximal size of the connection pool, i.e. maximum numbers of open connections to the database
hibernate.c3p0.max_statements	Size of the cache which contains prepared (compiled) SQL statements

cache: Cache service (class: de.tts.bd.business.CacheService)

This service provides a distributed caching facility. Caches are defined in the feature-config.xml. The use of caches are a key element in a high performance of the application because they minimize the number of roundtrips to the database. Distributed caches are

used to share cached data with other applications, for instance a BD Documentation Portal. Changes made to a distributed cache reflect in each application even when they are running on different machines.

Initial parameters	Description and permissible values
cacheProvider	Fully-qualified Java class name of the distributed cache provider.
cacheDomain	Name of the domain this application node is located in; domains are used to set the working boundaries for a cache.
cachePreload	If set to "true", the cache is preloaded by this node (activates the bootstrap loader).
peer.discovery	Select either multicast or unicast cache peer discovery mode (default: multicast).
peer.listener.host	The hostname the listener is listening on (default: localhost); this effects both, multicast and unicast mode.
peer.listener.port	The port the listener listens on. (default: 7800); only necessary in unicast mode.
peers.workbench	Comma separated list of peers (host:port) located in the workbench cache domain; only necessary in unicast mode.
peers.docportal	Comma separated list of peers (host:port) located in the docportal cache domain; only necessary in unicast mode.

feature: Service for customer-specific customizing (class: **de.tts.bd.business.FeatureService)**

Initial parameters	Description and permissible values
config	Path for the configuration file for customer-specific customizing. **Default setting:** "/WEB-INF/feature-config.xml"

lock: Lock service for objects (class: **de.tts.bd.business.LockService)**

This service is used internally to prevent other users from accessing objects whose Properties are currently being changed. It has to be present, but doesn't involve any initial parameters.

user: User management service (class: **de.tts.bd.business.UserService)**

This service provides user-related functions, like authentication and authorization. LDAP authentication is supported, if the ldap.* parameters are specified. The user object needs to be present in the application's database. The service authenticates a LDAP user by binding a LDAP session with the specified distinguished name. No service or admin user is required for this to work. If used with Microsoft Active Directory, the abbreviated form ${tts:user}@domainname can be used. Both LDAP parameters can be overwritten for each user in the user management console.

The LDAP parameters are described in the application-config.xml at section "== User Service ==". If you need more information about the LDAP configuration please consult the TTN Support.

Initial parameters	Description and permissible values
burst.retry.size	Number of attempts a user is allowed to enter his/her password correctly before access is temporarily blocked. **Default setting:** "2"
burst.denial.time	Period of time (in seconds) for which a user account is blocked when the user exceeds the maximum number of attempts to enter his/her password correctly. **Default setting:** "30"

search: Search engine service (class: de.tts.bd.business.LuceneService)

This service provides a multilingual full-text search and indexing facility. For the following objects a search index is created: processes, topics, courses and documents. The service only indexes object metadata, it does not index the content of documents.

Initial parameters	Description and permissible values
index.at.startup	If set to true, the application creates the indices, if they does not exist.

repository: Document repository service (class: de.tts.bd.business.RepositoryService)

This service provides access to the document repositories which contain the actual content of each document created by this application. Uploaded documents are first spooled to a local directory and then uploaded asynchronous to its repository. The asynchronous file upload requires the declaration of a maintenance interval to work.

Initial parameters	Description and permissible values
repository.maintenance.interval	Specifies the cycle at which the server checks that the document repositories are available (defined in terms of seconds). **Default setting:** "300" (5 minutes)
spool.maxRetries	Number of maximal retries of failed document uploads before the affected document is marked as "upload failed".
<maintenance-interval>	This parameter is specified via a separate attribute of the tag and it defines the cycle at which newly uploaded documents are imported from the internal cache to the document repositories (defined in terms of seconds). **Default setting:** "10"
showRepositoryTemplate	Makes repository templates available on GUI (default = false)
showRepositoryVersionTemplate	Makes repository templates for (file-)versioning available on GUI (default = false)

store: Store service (class: de.tts.bd.business.StoreService)

This service manages the stores used from this application. Depending on the base path provided the other stores (SearchIndexStore, DocumentSpoolStore...) will be created within this directory. Optional the base path of the stores (index, spool, image, config) can be defined independent from the base directory.

Initial parameters	Description and permissible values

store.base.directory	Base path of the Store Service. **Example**: "C:\dataStore"
store.spool.directory	Optional parameter to set the spool directory separated from the base path.
store.config.directory	Optional parameter to set the configuration directory separated from the base path.
store.index.directory	Optional parameter to set the index directory separated from the base path.
store.image.directory	Optional parameter to set the image store directory separated from the base path.

email: Mail service (class: de.tts.bd.business.EMailService)

Initial parameters	Description and permissible values
enabled	Enables or disables e-mail functions (values = "true" | "false", default = "false").
mail.smtp.host	Hostname or IP address of the SMTP server.
mail.smtp.port	Port number the SMTP service on the server is listening (default is 25).
mail.smtp.auth	Set to true, if the SMTP service requires authentication (values = "true" | "false", default = "false").
mail.smtp.user	Name of the user to authenticate against the SMTP service.
mail.smtp.pass	Password of the user to authenticate against the SMTP service.
mail.smtp.starttls.enable	Values = "true" | "false", default = "false"). If true, enables the use of the STARTTLS command (if supported by the server) to switch the connection to a TLS-protected connection before issuing any login commands. Note that an appropriate trust store must configured so that the client will trust the server's certificate. Defaults to false.
mail.smtp.connectiontimeout	Timeout of the connection to the SMTP service (expressed in milliseconds).
mail.smtp.timeout	Timeout of for sending data to the SMTP service (expressed in milliseconds).
mail.smtp.sendpartial	If set to true, send the message even if one recipient address is not valid (values = "true" | "false", default = "false").
default.email.dispatcher	E-mail address of the sender (From header).
default.email.bcc	E-mail address to send each outgoing message as blind carbon copy.

Release Service (class: de.tts.bd.business.ReleaseService)

The release service is needed to handle different releases of same document. It creates

document versions and assigns version numbers automatically.

Initial parameters	Description and permissible values
revisionDeleteEnabled	If this is set to 'true' or is not declared, document versions can be deleted. Otherwise, they cannot be deleted.

Workflow Service (class: de.tts.bd.business.WorkflowService)

The aim of this service is to provide the possibility to manage different workflows for documents. For every status the accessibility can be constrained and the change to another status can trigger freely configurable functions.

Initial parameters	Description and permissible values
rmetaAttribute	The meta attribute of documents that should be synchronized with workflow engine. That means, it will not be modifiable but be set automatically by the workflow engine. This should make the migration from older version easier. In most cases the value will be '**workflowstatus**'.

The available functions have to be configured on a separate section after the services section. The parameters depend on the concrete functions.

The functions section starts with the functions tag, which has no attribute. It optionally contains some *init-param* entries, that will be passed to all functions. After this the functions follows. Each function is declared by a *function* tag. The *function* tag can also contain *init-param* entries to pass some function specific parameters to the function. The *function* tag provides these attributes:

Attribute	Description and permissible values
name	Unique function name used to reference the function by the workflow engine. The name will also be shown to user at GUI to assign functions to transitions.
class	The implementing class of the function. *Note: In later times it may be make sense to use the same class for different functions, because the behavior may be differ depending on the committed parameters.*

Scheduler Service (class: de.tts.bd.business.schedule.SchedulerService)

The scheduler services executes asynchronous jobs on pre-defined timepoints or to the times committed by users with administration role using the GUI. The GUI will only be visible if at least one job has been configured. Up to 6.8. UNIX like cron expressions can be used to define execution times (see Quartz API for details).

Initial parameters	Description and permissible values
org.quartz.threadPool.class	The thread pool implementation to be used by this service. There

	should normally no cause to use another value than **org.quartz.simpl.SimpleThreadPool**.
org.quartz.threadPool.threadCount	Number of threads to execute jobs. The value depends on the expected number of jobs that will be run at the same time. In most cases a value of 3 up to 5 will be match.
org.quartz.jobStore.class	The implementation of container that holds the jobs waiting for execution. This should be **org.quartz.simpl.RAMJobStore**. This implementation holds the jobs simply in memory. Quartz also provides implementations to make them persistent or to share them between different VMs.
org.quartz.scheduler.instanceName	Freely selectable name for scheduler instance. It should be unique inside a VM.
org.quartz.scheduler.instanceId	Freely selectable id for scheduler instance. It has to be unique inside a VM.
org.quartz.scheduler.instanceId	Freely selectable id for scheduler instance. It has to be unique inside a VM.
scheduler.cronjobprovider	This parameter selects the implementation that provides the cron jobs to scheduler. At the moment there exists only one selectable implementation loading the cron jobs using hibernate. So the value for this parameter has to be **de.tts.bd.model.HibernateCronJobProvider**.
scheduler.resourcebundle	The resourcebundle that contains the resource for configured job. This may be replaced by a better solution later, but at the moment it is needed and should be set to **de.tts.bd.resources.content.jobs**
scheduler.crontable.default	The name of the crontable that contains the jobs for this scheduler. The crontable follows the service section of the application-config.xml file and will be described later.
scheduler.historyentries	The scheduler holds some information about that latest executed jobs. This parameter sets the maximum number of entries the execution history should contain.

The scheduler service is based on the Quartz library, so all configuration parameters this library provides can also be used for scheduler services. Have a look for Quartz manual to get additional information.

All those parameters are also available for the jobs triggered by the scheduler service. So in some cases it could make sense to add parameters that should be provide to all cron jobs. This depends on the job implementations that are in use.

A crontable starts with a *crontable* tag. This tag has following attributes:

Attribute	Description and permissible values
name	Unique crontable name. This name can be used to reference this crontable. (for example by the scheduler's **scheduler.crontable.default** parameter)

service	The name of the scheduler service that can access to this crontable (theoretically, there is more than one scheduler service possible for one application. But until now it should be **scheduler**.)
oldname	When starting server some information about the crontable will be made persistent in data base, because the users can change values by GUI. So in case of renaming a cron table there is the need to give the server the name of cron table that has been replaced. By default the value should be left empty.

Inside the *crontab* tag can optionally follow some default *init-param* entries. Declared here they will be passed to all jobs that are part of this crontable. The next entries inside the crontable tag will be the jobs, declared using the *job* tag. The *job* tag has these attributes:

Attribute	**Description and permissible values**
name	A unique name for the job. If the name is used as key at the resourcebundle declared for the scheduler, the matching values will be displayed on GUI.
class	The implementing class of the job.
description	A description for the job. If this is a key of the schedulers resources bundle, the matching resource will be shown on GUI.
cron	The default cron expression for this job. If it is allowed, it may be changed by any user.
editallowed	If this is set to **true**, the cron expression can be modified by users.

Inside the *job* tag can optionally follow some additional default *init-param* entries. Those are job specific.

feature-config.xml

The Properties of objects and views that are managed via the Workbench are defined in the configuration file 'feature-config.xml'. This is therefore the main file for customer-specific modifications to the knowledge model (customizing).

The 'feature-config.xml' consists of four main sections:

repository-providers

Specifies the types of document repositories and their Properties. In the standard system, there are only two types: 'filesystem' and 'webdav' – their Properties should not be changed.

trees

Defines the structure of the Workbench views (Process tree, Topic tree etc.) These specifications should not be interfered with.

content-handlers

Activates special handling routines for uploading certain types of documents (e.g. Team Trainer objects and ZIP archives). These settings should not be interfered with.

Since customer-specific modifications are usually limited to the Properties of objects, the following part of the document provides an in-depth analysis of the 'entities' section.

10.2 Setting up access keys to navigate the TT Knowledge Force

10.2.1 Essential information

Similar to its predecessor Team Trainer, in TT Knowledge Force it's possible to display shortcuts for the various navigation buttons by pressing the Alt Gr key (or pressing the Alt+Ctrl key combination). Each shortcut is then displayed as a flag next to the corresponding button.

This includes all the HTML elements in the navigational components (Comment window, enhanced function area, all views of the module frame etc.) that have an "access key" attribute.

The flags are immediately hidden if a key - that does not correspond to a shortcut - is pressed.

When the flags are on display, it's possible to trigger the corresponding function via the respective "access key". The flags are also displayed when a new UI element appears.

If the flags are not displayed, it's still possible to trigger the corresponding function via the keyboard - depending on how your browser deals with the "access key" attribute.
Example:

- In Internet Explorer via the Alt key
- In Firefox via the Alt+⇧ key combination

The "access key" attributes may be language-dependent. Similar to the "title" attributes (Quickinfos), these are specified in the respective "player.text.xx-xx.js" file.

The flags are not displayed if a key - or key combination - interaction via the "Ctrl+Alt" or "Shift+Ctrl+Alt" keys is active in the current e-Learning step.

10.2.2 Customizing options

- Key or key combination that displays the "access key" flag (default: Alt+Ctrl)
- Visibility of flags if using the key/key combination (default: true)
- All style definitions for the flags can be modified via CSS (default: Font: Arial, 12px; Color: #000000; Background color: #FFFFAA)

The "access key" attributes can be modified in Customizing. An "access key" can be deleted by specifying an empty string.